

**Spatial distribution of anuran assemblages from
Caxiuanã, Brazil: Testing the riverine barrier
hypothesis and the influence of life-history traits**

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Declaration

I declare the, with the exception of any statements to the contrary, the contents of this thesis are my own work, that the data presented herein has been obtained by experimentation and that no part of the report has been copied from previous thesis', book, manuscripts, research papers or the internet.

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Print name.....

Date.....

Abstract

Knowledge of community composition is essential for the understanding of biodiversity and forming effective conservation plans. In the Amazon basin, the spatial structure of animal communities has often been explained by the riverine barrier hypothesis, which assumes that large rivers act as main ecological drivers of diversification. However, life-histories, functional traits and environmental factors other than rivers have also been shown to affect the distribution of species in the Amazon. Typically, the riverine barrier hypothesis focuses on large Amazonian rivers and little research has been conducted on small geographical scales. Through the analysis of an available dataset compiled by numerous researchers over 20 years on anuran assemblages along the Caxiuanã River in Para, Brazil, differences in local assemblage composition were investigated to test the riverine barrier effect. After accounting for sampling bias, the present work shows that anuran composition varies throughout the studied assemblages in Caxiuanã, and that life-histories and functional traits of species likely play a larger role in small-scale diversification than the Caxiuanã River does as a barrier. These results demonstrate that assemblage diversification can occur at a relatively small geographical scale as influenced by differences in life-histories by species adapted to given areas. Future research should not overlook the importance and potential of ecological differences on small scales. In-depth understanding of factors that influence spatial distribution of species will lead to effective conservation plans.

1.0.Introduction

1.1.Species richness and biodiversity

Researchers have used a variety of methods to estimate the total number of animal species on Earth. Past estimates of global species ranged from 1.4 to 1.8 million (Southwood, 1982; Stork 1988), with some predications estimating medians of between 2.5 million to 3.7 million tropical arthropod species alone (Hamilton et al., 2010). One of the most recent and popularly cited estimations is by Mora et al. (2011), who predicted that there are an estimated 8.7 million (± 1.3 million) eukaryotic species globally, 2.2 million (± 0.18 million) of which are marine. However, other estimations place the total marine species between 0.7 to 1.0 million (Appeltans et al., 2012). A recent review of the literature on global species richness classed the species total as 5 ± 3 million, 1.5 million of which are already named, with the remaining species a combination of those to be described and to be discovered (Costello, May & Stork, 2013). Understanding the extent of earth's species richness will provide a practical metric for distinguishing habitats and tracking progress in exploring global biodiversity, paving the way for studies to investigate populations, genetics, and biochemical diversity in greater detail (Costello, May & Stork, 2013).

Both terrestrial and aquatic tropical ecosystems are characterised by high levels of floral and faunal diversity (Myers et al., 2000; Brown, 2014). Commonly, the characterisation of tropical areas is those that are located between the latitudinal boundaries relating to direct solar exposure 23.4° north and south of the equator (regions of Cancer and Capricorn, respectively, accounting for 36% of the earth's surface, Stroud & Feeley, 2017). Of the 25 global biodiversity hotspots, 16 occur in the tropics, and 15 are represented by tropical forests (Myers et al., 2000). The need for more tropical research has been emphasised since the early 1960s (Richards, 1963), due to a distinct difference in species richness and diversity in tropical zones compared to temperate zones (Clarke et al., 2017; Stroud & Feeley, 2017). There is a bias for studies in temperate ecosystems, particularly favouring America and north-western Europe (Clarke et al., 2017). The five countries with the highest richness of endemic plant and animal species with important functional traits (Ecuador, Costa Rica, Panama, the Dominican Republic, and Papua New Guinea) account for only 1.6% of publications on the topic (Wilson et al., 2016).

1.2. Assemblage composition and species distribution

Understanding the distribution of species is essential to understanding biodiversity (Halffter, 1995), community ecology (Weiher & Keddy, 2001) and in producing effective conservation plans (Silvano & Segalla, 2005). However, a characteristic feature of species is that they are not uniformly distributed. Therefore, abundances of the same species can differ between similar habitats, and factors found to have a positive influence on the distribution of one species cannot be extrapolated to similar species (Menin, Waldez & Lima, 2008; Jorge et al., 2016). The distribution of species also changes temporally, determined by the species ability to adapt and its resilience to changes in environmental conditions (Smith & Smith, 2012). Scientists have long been intrigued by which variables have the most impact in structuring community composition.

In this research, the term 'assemblages' will be used for communities (species located at a given place and time) in which species are taxonomically related (Fauth et al., 1996).

Predictions have been made on what factors likely play an important role in the structuring of assemblages and their distribution. Abiotic environmental factors can directly affect the distribution of a species through physiological constraints (Eterovick, 2003; Werner et al., 2007), while edaphic factors indirectly affect the composition of assemblages by restricting plant species that can survive in the area, and thus animal species (Rojas-Ahumada et al., 2012). A combination of biotic, abiotic and functional trait factors has often been favoured for the explanation of assemblage composition (such as the availability of food, space, light, or water; e.g. Menin et al., 2007) and the life-history of species (Keddy, 1992, McGill, 2006).

Although species with similar environmental requirements will not co-exist due to overlapping niches and competition for similar resources, it can be assumed that similar assemblages likely inhabit similar habitats (e.g. Keller et al., 2009). Another rule assumes that the environment will act as a filter and remove any species that do not have the characteristics that allow them to persist and survive in that location (Weiher & Keddy, 2001; Sobral & Cianciaruso, 2012). Other hypotheses include that communities result from short-term ecological interactions and/or long-term evolutionary processes that operate at different timescales, affecting the number and identity of co-occurring species (Ricklefs, 2004). A further line of research focuses on the importance of functional traits and their role

in ecosystem functioning and community composition (Laureto, Cianciaruso & Samia, 2015). Functional traits are the characteristics of an organism considered to be relevant to the environment or to ecosystem functioning, and the value and range of these traits among organisms in the ecosystem is known as functional diversity (Diaz & Cabido, 2001). Knowledge of these traits among an assemblage may lead to a greater understanding of factors that are key to the assemblage of communities.

Understanding the dynamics of species distribution and community structure allows for the mapping of their geographical range and will greatly improve conservation efforts for those species. Examining common factors for species that are declining may allow us to predict whether they are at further risk in the future. If the same factors cause declines at multiple sites, then the surviving species should share traits to promote persistence, while vulnerable species should share traits that make them more susceptible to decline (Lips, Reeve & Witters, 2003). However, it is important to note that most of the data for the world's biota have been obtained with different methods and are often not directly comparable (Heyer et al., 2014; Rojas-Ahumada & Menin, 2010).

1.3. Riverine barriers

Many hypotheses have been proposed to understand the extremely high biodiversity witnessed in the Amazon rainforest. Alfred R. Wallace (1852) first proposed that rivers can affect the structure and distribution of regional species assemblages, most significantly the formation of the Amazon River network which caused vicariance among Amazonian species (Ribas et al., 2012). The riverine barrier hypothesis has focused primarily on large rivers, such as the Amazon (Hayes & Sewlal, 2004; Ribas et al., 2012; Kaefer et al., 2013), Madeira (Kaefer et al., 2013; Dias-Terceiro et al., 2015), and Tapajos River (Moraes et al., 2016), while there is little evidence of smaller rivers also exhibiting a barrier effect. The multiple taxa within the Amazon have shown to be affected by the riverine barrier effect include plants (Collevatti et al., 2009; Nazareno, Dick, Lohmann, 2017), insects (Hall & Harvey, 2002), birds (Bates et al., 2004; Hayes & Sewlal, 2004; Fernandes et al., 2012, 2013, 2014), primates (Boubli et al., 2015; Link et al., 2015), and amphibians (Lougheed et al., 1999; Funk et al., 2007; Fouquet et al., 2014, 2015; Moraes et al., 2016).

The riverine barrier hypothesis has three main criteria: (1) reciprocally monophyletic populations will occur on opposite river banks (Funk et al., 2007; Ribas et al., 2011; Boubli et al., 2015; Santorelli, Magnusson & Deus, 2018), (2) species composition similarity will be greater in localities on the same bank than sites on opposite banks separated by the same distance (Ron, 2000; Hayes & Sewlal, 2004; Santorelli, Magnusson & Deus, 2018), and (3) the species distribution boundaries will coincide with large rivers (Ron, 2000; Hayes & Sewlal, 2004; Ribas et al., 2011; Boubli et al., 2015; Santorelli, Magnusson & Deus, 2018). Certain characteristics of rivers affect populations in different ways. Larger rivers have been found to restrict gene flow and dispersal leading to the isolation of populations on opposite river banks and areas of endemism (Hayes & Sewlal, 2004; Dias-Terceiro et al., 2015), while smaller rivers have been known to affect populations on local scale, potentially restricting distribution within the area (Hayes & Sewlal, 2004). Meandering rivers may offer greater opportunities for gene flow, while rivers with a fast current could act as stronger barriers restricting distribution (Bates et al., 2004). Furthermore, the magnitude the riverine barrier effect has on a species is influenced by specific life-history traits (Fouquet et al., 2014, 2015; Moraes et al., 2016). Therefore, it is difficult to apply a set of rules regarding the effect of riverine barriers in the Amazon (Dias-Terceiro et al., 2015), as the individual hydromorphological dynamics such as water flow, width and sediments vary through time and exert unequal influence on the evolutionary history of the biota in the respecting areas (Gascon et al., 2000; Bates et al., 2004; Moraes et al., 2016). In addition, the vast range of functional traits among such a large number of taxonomic groups in the Amazon increases the difficulty in trying to propose a general set of rules for riverine barrier effects.

1.4. The Amazon rainforest

Amazonian forests have been an important part of earth's ecosystem functioning since the Cretaceous period (Maslin et al., 2005). Tropical rainforests prevailed in South America during the Eocene epoch (56-34 myr ago; Burnham & Johnson, 2004), although their prevalence might have begun already during the Palaeocene (66-60 myr ago; Morley, 2000). Extant rainforests are restricted between the regions of Cancer and Capricorn (between ca. 23.4°S and 23.4°N; Stroud & Feeley, 2017) at areas that have an annual rainfall of 1800 mm

or greater. Dry seasons, where monthly rainfall can be as little as 100 mm, can last a few months. Temperatures throughout the year vary between 18°C and 28°C (Burnham & Johnson, 2004). Spread across nine South American countries, mostly dominated by Brazil, the Amazon rainforest is the world's largest continuous tract of forest and contains the largest river system (Charity et al., 2016). The term Amazon can be ambiguous in relation to the actual range of this biome. Herein, the term Amazon/Amazonia (unless stated otherwise) will refer to the Amazon basin as shown in Figure. 1.



Figure 1. Boundaries of the Amazon region. The green line represents the Amazon basin, and the blue line represents Amazon biome. Base map sourced from Google maps; Ranges adapted from Charity et al. (2016).

Tropical evergreen forest is the most dominant vegetation type in the Amazon, accounting for 80% of the area and nearly half of the world's undisturbed tropical evergreen forest (Melillo et al., 1996), followed by agricultural landscapes (6.8%), savanna (4%), Varzea and Igapó forests (3.9%) and deciduous forest (1.4%, Charity et al., 2016). The Amazon River is the largest river in the Amazon basin and splits into 13 major tributaries. The freshwater systems include widespread riparian and non-riparian zones. Riparian zones are defined as the area around the margins of water bodies susceptible to flooding (Gregory et al., 1991). Riparian forests are key to facilitating the provision of key ecosystem services such as the

prevention of soil erosion, the maintenance of water flows and water quality, and the conservation of biodiversity and ecological connectivity (Lees & Peres 2008; Castello et al. 2013).

Varzeá (whitewater) forests are characterised as nutrient-rich eutrophic alluvial soils with a high pH due to the large amounts of sediments brought down from the Andes into the water, resulting in a cream coloured appearance. Igapó (blackwater) environments have no suspended sediment and contain humic matter such as tannins, phenolics and other related compounds which leach in the water producing a distinct dark and transparent composition (Vital & Stattegger, 2000; Kricher, 2011). Both forest types are subject to permanent or periodic inundation, reaching heights of 15 m during peaks (Macedo & Castello, 2015). Due to the lack of sediments and thus nutrients, Igapó forests are unable to provide the resources needed to sustain as high levels of biodiversity as Varzeá forests. For example, a well-studied Varzeá site (Manu river, Cocha Cashu biological station) contained 1,856 higher plant species (in total 751 genera and 130 families; Foster & Hubbell 1990), whereas a well-studied Igapó site (Negro river, Reserva Ducke) contained 825 vascular plants from 88 families (Prance 1990; Gentry 1982).

The total number of species in Brazil is estimated at 1.8 million, a number which is likely an underestimation (Lewinsohn & Prado, 2015). One-tenth of all global species and an estimated quarter of all terrestrial species occur in Amazonia (Dirzo & Raven, 2003). It has been estimated that over 90% of mammals, birds and plant species are described in the Amazon. However, only a maximum of 10% insect species have been described (Hoorn et al., 2011), and around 6000 more fish species are yet to be described (Macedo & Castello, 2015). Not only is the Amazon rainforest essential to the survival of flora and fauna which reside there, it also plays an important role in climatic processes. The Amazon River accounts for 17% of the total global freshwater discharge into the oceans (Callede et al., 2002), and serves as one of the world's largest carbon sinks (storing around 15-200 petagrams of carbon in living biomass and soils; Baker et al., 2004; Feldpausch et al., 2012). In addition, Amazonia accounts for the equivalent of about 10% of the world's terrestrial primary productivity (Melillo et al., 1993) and 15% of global terrestrial photosynthesis (Field et al., 1998). The maintenance of the Amazon rainforest is vital to preventing excessive species extinction as well as a dramatic increase in the effect of climate change (Malhi et al., 2009).

However, despite its importance, the Amazon is relatively understudied (Silvano & Segalla, 2005).

During 2004 to 2012 there was a substantial 84% decline in Amazonian deforestation (Fearnside, 2017), followed by a small increase in deforestation from 13% in 2001 (Soares-Filho et al., 2006) to 17% in 2016 (Charity et al., 2016). However, this reduction in deforestation was short lived as a 29% increase in deforestation was seen in 2016 alone (Fearnside, 2017). Some simulated deforestation scenarios predicted that under habitat destruction rates continuing as at the beginning of the century ('business-as-usual') 40% to 85% of Amazonian forests could be lost (Soares-Filho et al., 2006). A 'governance' scenario, with effective Brazilian environmental legislation implemented across the Amazon basin, was predicted to lead to an increase of protected forest areas to 41% with all the forest within these areas being intact and only 50% of non-protected areas subject to disturbance (Soares-Filho et al., 2006). With the recent increase in Amazonian deforestation as of 2016, the 'business-as-usual' model is becoming more and more plausible.

1.5. Amazonian anurans

Particularly owing to the Amazon rainforest, Brazil is the country with the highest species richness of anurans on earth (Vitt & Caldwell, 1994; Buckley & Jetz, 2007). At the time of writing (07/04/18), there were 7828 recorded amphibians worldwide, 6902 of which were anurans (Frost, 2017). Brazil is home to 1124 amphibians (14.36% of the global total), 1080 of which are anuran species (13.80% of the global total) represented by 20 families and 90 genera (Frost, 2017). Anuran species richness continues to increase from past estimations (Avila-Pires et al, 2012), unlike that of birds (May & Beverton, 1990) and mammals (Glaw & Kohler, 1998) where new species discovery have relatively plateaued.

According to the Census of Biodiversity of the Brazilian Amazon (<http://www.museu-goeldi.br/censo/> Accessed 07/04/2018), there are 309 species of anurans within the borders of the Brazilian Amazon. However, this is likely a significant underestimation. Greater amphibian diversity has been recorded in western Amazonia compared to eastern Amazonia (Azevedo-Ramos & Galatti, 2002), with a distinct cline of variation among northern and southern Amazonian anuran assemblages along an altitudinal gradient (Menin, Waldez &

Lima, 2008), and riparian zones playing an additional role in determining species richness and community structure (Ribeiro, Lima & Magnusson, 2012).

Broad-scale ecology has largely focused on endothermic vertebrates, and drivers of amphibian distributions and diversity are poorly understood (Buckley & Jetz, 2007). The distribution of anurans is known to be affected by abiotic variables such as temperature, precipitation and humidity (Keller et al., 2009), along with their ecological demands such as determined by their reproductive modes (Haddad & Prado, 2005). The ectothermic nature of anurans renders them susceptible to numerous terrestrial and aquatic environmental factors such as water and temperature. For example, from a highland sample site in Monteverde, Costa Rica, the abundances of 20 out of 50 anuran species dramatically decreased due to reduced dry-season mist frequency driven by global warming (Pounds, Fogden & Campbell, 1999). Bitar et al., (2017), analysed the effect of 22 environmental properties (including variations of temperature, precipitation, forest properties, and watercourse properties) on anuran species turnover and distribution. Different communities were affected by different variables with varying intensities. Anurans have been generally accepted as relatively easy to sample (Heyer, 1994). However, some difficulty can arise in identifying anurans due to their cryptic nature (Avila-Pires et al., 2012).

Amphibians have become the fastest declining vertebrate taxon worldwide (Beebee & Griffiths, 2005). Geographic distribution of rapidly decline species is non-random, and amphibian species from neotropical areas are more affected than species from Afrotropical and Indomalayan realms (Stuart et al., 2004). Furthermore, enigmatically declining species in the tropics are positively associated with streams at high elevation, and negatively associated with still water and low elevations (Eterovick et al., 2005). Species with wider geographically ranges are more likely to become locally extinct compared to species with limited distribution (Eterovick et al., 2005). However, Deichmann et al. (2010) found there was no significant decline in abundance or biomass of amphibians over 35 years at a study site in Central Amazonia. This contrasts greatly with other investigations showing a decline in anuran populations (Pounds, 2001; Lips, Reeve & Witters, 2003; Stuart et al., 2004; Eterovick et al., 2005; Pounds et al., 2006; Whitfield et al., 2007). This demonstrates that the global decline of amphibians is not uniform, and some species of anurans are more resilient or less affected than others.

1.5.1. Variables influencing Amazonian anuran distribution and assemblage composition

Attempting to define a set of rules that determine anuran distribution and assemblage composition is difficult, as the relevant literature often reveals that many factors contribute with levels of importance depending on the study site. Biogeographic studies on amphibians are still rather rare, and riddled with taxonomic issues. When compared with more mobile taxa such as primates or birds, Amazonian anuran species appear to be relatively restricted in their distribution, but more information is needed to specify the factors that cause this observation (Avila-Pires et al., 2012).

In the Amazon, distance from stream is one of the most highly supported variables affecting species distribution, particularly for riparian anurans (Condrati, 2009; Menin, Waldez & Lima, 2011; Prado & Rossa-Feres, 2014; Moraes et al., 2016), although this association is not always found (Dias-Terceiro et al., 2015). Also, attributes of watercourses, such as width (Bitar et al., 2017), size (Keller et al., 2009), pH (Jorge et al., 2016) and hydroperiod (Prado & Rossa-Feres, 2014) can structure anuran communities in lentic environments (Silva et al., 2011). Edaphic properties such as clay content have been shown to have positive or negative correlations with anuran abundance depending on the species (Menin et al., 2007; Dias-Terceiro et al., 2015). Elevation, slope and altitude have also been shown to influence anuran abundance (Menin et al., 2007; Condrati 2009; Ribeiro et al., 2012; Rojas-Ahumada et al. 2012; Dias-Terceiro et al., 2015). However, clay content is often related to such other variables, and it is, therefore, unclear which variable is having a direct effect on assemblage composition (Rojas-Ahumada et al., 2012).

There are varying levels of dependency on water for Amazonian anuran species. Some are fully aquatic (e.g. *Pipa pipa*; Rabb & Rabb, 1960; 1963), whereas others depend on water only for reproduction (e.g. *Allobates femoralis*, Lima et al., 2006), and others are entirely independent of water (*Pristimantis fenestratus*; Lima et al., 2006). Aquatically reproducing species are restricted by the presence of suitable breeding sites (Zimmerman & Bierregaard, 1986; Menin et al., 2007), although explosively breeding species have perceived distributions and abundances during mating periods which differ from non-mating periods (Menin & Lima, 2011). Anuran species richness is also overall higher at sites adjacent to streams (Rojas-Ahumada et al., 2012). Species which are less dependent on water rely on air moisture to prevent desiccation (Duellman & Trueb 1986; Haddad & Prado 2005). The

presence of suitable water bodies for reproduction is mainly thought to structure the distribution of aquatic-breeding anurans, while terrestrially breeding anuran abundance and species richness are positively affected by leaf litter depth (Fauth et al., 1989). However, more recent results have also shown a negative effect on anuran species richness and abundance relating to leaf litter depth (Menin et al., 2007).

Biotic factors have also been shown to play an important role in assemblage structure, although depending on the study specific factors can have both a positive or negative influence. The structure of the environment, including, forest type (Gascon et al., 2000; Garda et al., 2013), tree density (Menin et al., 2007, 2011; Condrati, 2009), vegetation structure (Dias-Terceiro et al., 2015), pond vegetation (Prado & Rossa-Feres, 2014) and leaf litter morphology (Menin et al., 2007; Siqueira et al., 2014) has been shown to explain community composition. As abiotic and biotic factors vary in intensity depending on the location, other variables such as life histories may be a key role in structuring assemblage composition (Melo et al., 2014). Arboreal species experience a different habitat than terrestrial species, resulting in different responses to environmental variables limiting the distribution of species (Menin & Lima, 2011).

1.6. Caxiuanã

Caxiuanã National Forest is a large river riparian forest (Moraes et al., 2016) located in north eastern Amazonia, in the state of Para, south of the Amazon River and west of Belém (Figure 2). The area consists mainly of terra firme forest, which accounts for 80-85% of the area, in addition to permanently inundated Igapó forests, Varzeá forests and natural fields dominated by grass (Lisboa, 1997, 2002). Uncommon habitat types consist of swampy areas, sandy beaches, and peri-anthropoc environments (Lisboa et al., 1997). Caxiuanã has an altitude of 30 m, a mean annual temperature of 26.8°C, an annual temperature range of 11.2°C, an average annual rainfall of 2223 mm (Bitar et al., 2017), and an average annual relative humidity of 82.3% (Oliveira et al., 2008). There is a pronounced dry season between July and December, where rainfall in total averages around 555 mm (Fisher et al., 2006). The rainy season runs from January through June (Lisboa, 1999). Mean canopy height is 35 m with some trees reaching 50m (Oliveira et al., 2008). There are between 450 and 550 plant species per hectare (Oliveira et al., 2008). Approximately 85% of watercourses in Caxiuanã

are lentic, with a mean width of 30.4m (ranging from 2.9 m to 50m, Bitar et al., 2017). There is a high of deposition of organic material, and an abundance of aquatic vegetation (Bitar et al., 2017).

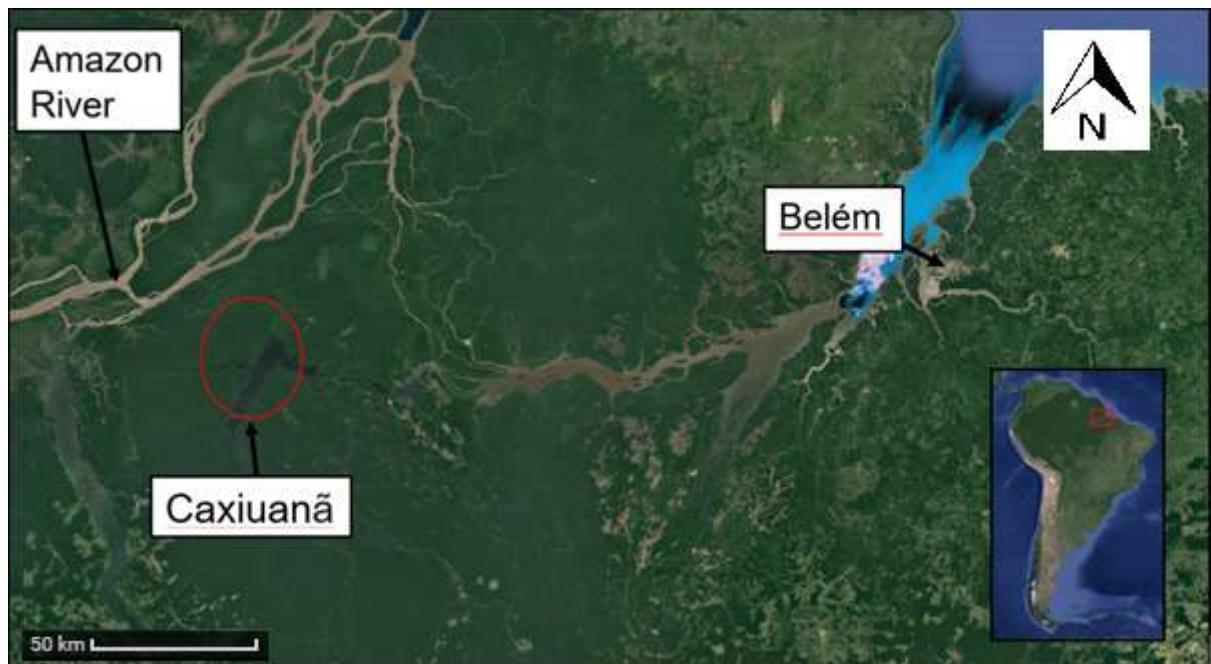


Figure 2. Map of North-Eastern Brazilian state of Pará, highlighting Caxiuanã national forest. Base map sourced from Google Maps.

Notable areas where research is conducted include the Biodiversity Research Program (Programa de Pesquisa em Biodiversidade PPBIO), a 5 x 5 km plot, which primarily monitors local biodiversity changes (Andreae et al., 2002; Figure 3). The Ferreira Penna Scientific Station (Estação Científica Ferreira Penna (ECFPn) is the main research station in Caxiuanã located along the Curuá River (Figure 4). The Brazilian Institute of Environment and Renewable Natural Resources (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA; Figure 4) is located in the southern side of the Caxiuanã River south of ECFPn.

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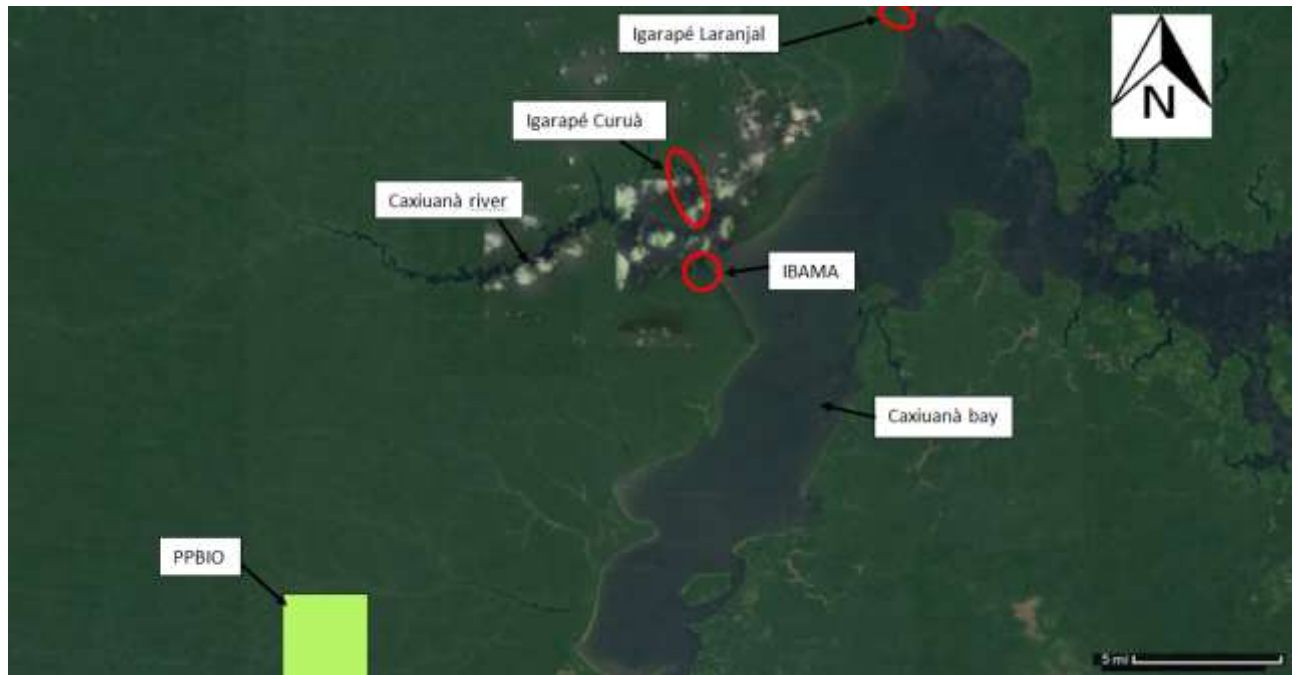
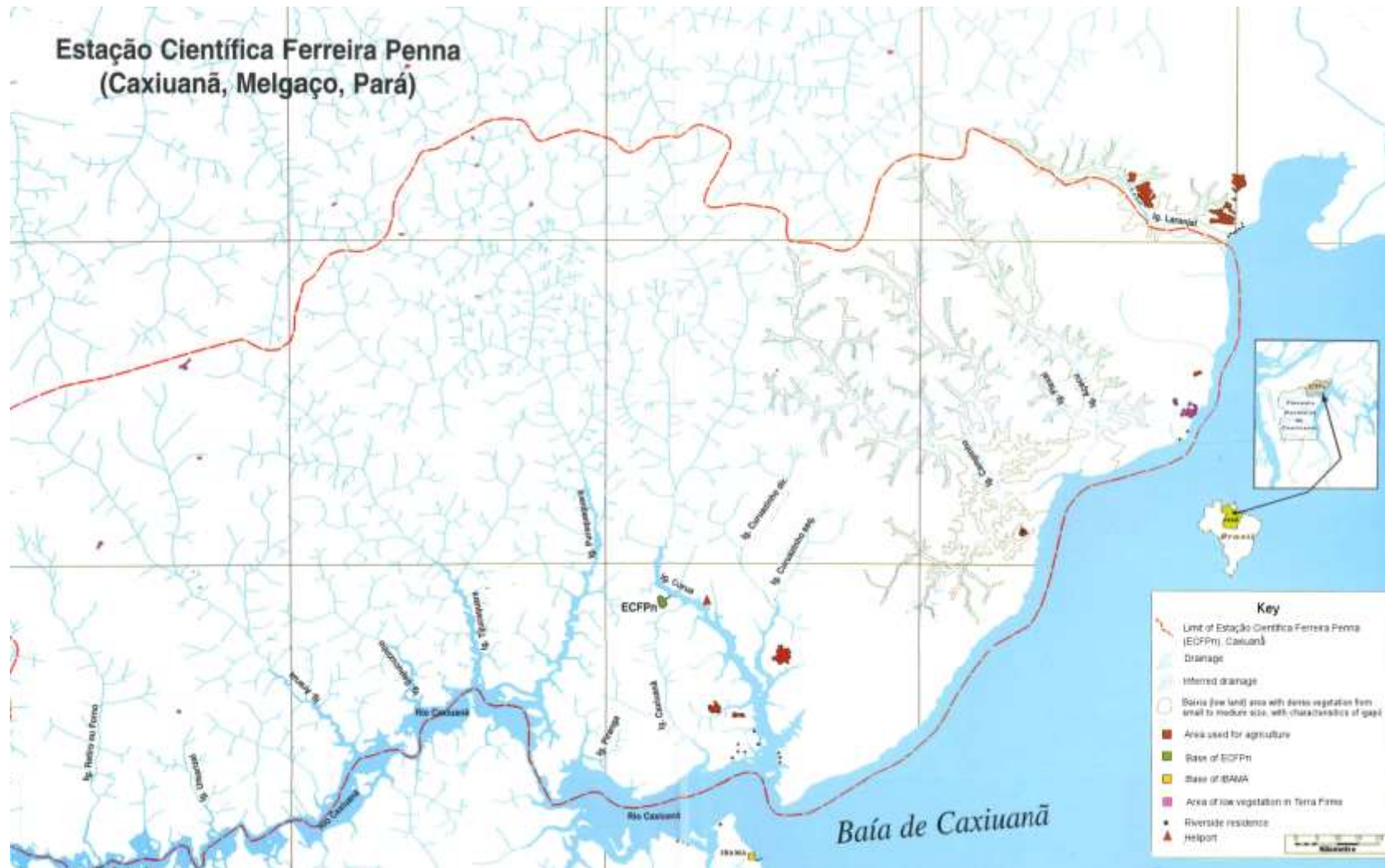


Figure 3. Key areas throughout Caxiuanã, including research areas and waterways. Base map sourced from Google Maps.



Figure

4.
Northern

map of Caxiuanã, focused on the Caxiuanã River (Portuguese translation Rio Caxiuanã) and showing the tributaries designated by 'Ig' meaning 'Igarape'. Scanned physical copy and adapted from the original author Luis Barbosa.

Research in Caxiuanã has mainly focused on reptiles (particularly squamates), and overall the area is relatively understudied (Lisboa, 2012). Past researchers have commented on the population differences that occur in Caxiuanã without the existence of obvious factors justifying such differences (Avila-Pires et al., 2012). Bitar et al. (2017) investigated factors that may explain anuran species turnover in three eastern Amazonian terra firme forests, revealing that Caxiuanã was enigmatically different in relation to anuran species richness and its determinants, possibly due to physiographic features not present in the other two areas. Four species were only collected in Caxiuanã and not in the other localities, compared to 12 and 21 species that were solely collected in Tapajos and Amapa, respectively. Caxiuanã indeed has no recorded endemic species (Azevedo-Ramos & Galatti, 2002). One explanation for the difference noted in Caxiuanã was that the area has physiographic features not found in the other sample areas, such as Ria lakes, also known as blocked valleys. These areas are characterised by low sediment transportation in comparison to main river systems (Latrubesse, 2012), which may influence anuran distribution and community characteristics.

1.7. Aims and objectives

This thesis investigated, at a population level, how the assemblage composition of anurans could be influenced by riverine barrier and life history traits, in the north-eastern section of the Caxiuanã national park, Brazil. Understanding factors that govern spatial distribution of organisms will greatly aid conservation efforts to protect endangered or threatened species. Anurans were chosen as the sample species because of their continuous global decline, their abundance throughout the Amazon rainforest and the study site, and the general understudied nature of the Amazon. There are three main aims of this research. Firstly, to analyse the barrier effect of the Caxiuanã River on the residing anurans. Riverine barrier effects are commonly thought to be important only for large rivers such as the Amazon River and its tributaries (Hayes & Sewlal, 2004; Dias-Terceiro et al., 2015; Moraes et al., 2016). Secondly, to compare different anuran assemblages in Caxiuanã regarding species composition and life-history traits. Finally, to provide in-depth statistical analysis comparing multiple diversity indices and richness estimators across the assemblages, evaluating the most effective to use and provide quantitative data to be used in future research. The main

objective was to use a large dataset compiled of species, location, habitat, microhabitat and date of anuran sampling data collected over two decades, supplied to the researcher by Museu Paraense Emilio Goeldi, to analyse trends on anuran spatial distribution and community composition in the study area incorporating life-history traits of the sampling individuals and taking the methodological issues into consideration. Furthermore, combining distributional, species richness, diversity and life-history trait information joins together multiple hypotheses for the explanation of species distribution in this north-eastern area of the Amazon Rainforest. A further objective was to use species richness estimators and diversity indices to provide quantitative information on the potential riverine barrier effect of the Caxiuanã River.

2.0.Methods

In total, the researcher stayed for two months (11th February to 4th April 2017) in the city of Belém, working at the Museu Paraense Emilio Goeldi (MPEG) research campus in contact with several well-established Amazonian researchers (primarily Dr Ulisses Galatti, and to a lesser extent, Dr Marinus S. Hoogmoed, Dr Teresa C.S. Avila-Pires and Dr Alexandre Alexio). One week (14th to 20th February) was spent on-site at ECFPn to experience the Caxiuanã environment, the varying habitats (Appendices 1 & 2), and the biodiversity (Appendix 3) of the area to aid future analysis and writing of the thesis. Data collection by the researcher was not permitted due to research license complications.

Once returned to Belém, data consisting of information on 1838 anuran individuals, including species collected, location, habitat, microhabitat, date, GPS coordinates and collector of individual, compiled from 1991 to 2012 by approximately 50 collectors, including several well-established herpetologists (Dr M.S. Hoogmoed, Dr T.C. S. Avila-Pires, Dr U. Galatti and Dr J. A. R. Bernardi), field assistants and locals were provided to the researcher by MPEG. Additional data which were not yet included in the original dataset (location, habitat, and microhabitat) were added by the researcher via collector's field notes supplied by MPEG. Some data have previously been used in published research (Avila-Pires & Hoogmoed, 1997; Bernardi, 1999; Estupinan, Bernardi & Galatti et al., 1999; Hoogmoed & Avila-Pires, 2012). Avila-Pires & Hoogmoed (1997) focused on the sampling of anurans,

lizards and snakes and consisted of four sampled periods between from 1992 to 1993. Sampling was conducted by a variety of personnel including the authors, research teams and staff at the ECFPn field station. Drift fences, pitfall traps and acoustic surveys conducted diurnally and nocturnally were the main collection method and placed along pre-existing trails in mostly terra firme forest in Caxiuanã. They concluded that all species sampled were already known to occur in eastern Amazonia and differences between IBAMA and ECFPn sites may be due to different water dynamics. Bernardi (1999) focused on anuran species in Caxiuanã and involved four sampling periods throughout the rainy and dry season in 1998. Sampling involved transect and audio surveys with drift fences and pitfall traps along eight transects (850 m each) on the Igarapé Araua and Igarapé Laranjal (Igarapé refers to a tributary). Estupinan, Bernardi & Galatti (1999) conducted diurnal and nocturnal transect surveys and used pitfall traps at the Igarapé Araua and Igarapé Laranjal in terra firme, secondary forest, Igapó and aquatic vegetation habitats. Sampling occurred bimonthly from 1997 to 1998 across six 850 m transects. Hoogmoed & Avila-Pires (2012) focused on the colour polymorphism of *Dendrobates galactonotus*; individuals used in this research were collected from five periods ranging from 1992 to 2012 from multiple sites around Para, Brazil, including Caxiuanã. Additional material was collected from the MPEG archives. Some records in the published research were deemed unsuitable for a variety of reasons and not included in the database provided to the researcher. Individuals collected were stored in ethanol in the herpetological archives at MPEG for future reference. Other than the methodology from the published data and those individuals collected at the PPBIO site, which were primarily via pitfall traps and transects, the methodology used by collectors during sampling of individuals is unknown.

2.1. Study areas

The most common habitat within Caxiuanã national forest is terra firme forest which comprised 85% of the area (Lisboa et al., 1997). The studied assemblages were split into two areas. The north consisted of the Curuá and Laranjal assemblages, and the south comprised the PPBIO and IBAMA assemblages. In addition to primarily terra firme forest, the northern assemblages included areas of secondary forest (capoeira), Igapós, open fields, rich aquatic vegetation along the banks of the rivers and anthropogenic areas (Lisboa et al., 1997; Estupinan, Bernardi & Galatti et al., 1999). Terra firme edaphic properties vary greatly in the

area depending on sand and clay proportions; litter thickness is dependent on soil type and ranges from 0.1 to 2.0 cm (Bernardi, 1999). Capoeira areas were formed at least 35 years ago and are dispersed throughout the ECFPn range mainly for small agricultural crops such as manioc. Many residents in the area were moved out by the federal government in the 1960s (Bernardi, 1999). Igapó habitats are acidic and poor in nutrients, and the spacing between trees in the northern assemblages is greater and the height of vegetation is lower than in the terra firme forest (Bernardi, 1999). A grid system of trails near to the Curuá assemblage consist of east-west trails crossed every 50 m by 23 north-south trails, generally 700 m in length (Avila-Pires & Hoogmoed, 1997). The southern assemblages are characterised by similar habitats than the northern assemblages. IBAMA comprises of some pre-existing trails and dirt roads within a relatively low terra firme forest, and a residential area with peri-anthropoc environment. The shore includes sandy beaches surrounded by Igapó areas (Avila-Pires & Hoogmoed, 1997). The PPBIO plot consists largely of undisturbed terra firme forest with natural clearings due to tree fall. Some sections of the area are subject to seasonal flooding by the overflow of small streams (Silveira et al., 2012).

2.2. Life-history descriptions

Overall nine life-history traits were analysed for the collected anuran species. Categorisation of the species was based on Lima et al. (2006), the supporting data of Moraes et al. (2016) and online information (IUCN Redlist <http://www.iucnredlist.org/>; Amphibiaweb <http://www.amphibiaweb.org/>). 'Habitat preference' refers to the broad habitat type where the species is most commonly collected; 'terrestrial' includes species that are fully terrestrial and semi aquatic, 'arboreal' includes species that inhabit high vegetation such as trees, 'aquatic' includes fully aquatic species, and 'fossorial' refers to burrowing species. 'Riparian' refers to whether the species is dependent on riparian habitats, a common environment throughout Caxiuanã. For 'reproductive type', 'aquatic' was defined as any species that requires water throughout any single stage of its development, such as *Hypsiboas geographicus* and *H. lanciformis* which deposit their eggs on leaves above waterbodies where the tadpoles continue development. Under 'aquatic reproductive type', 'arboreal' was defined as species which lay eggs in water in tree holes or bromeliads. 'Known distribution in

Amazonia' defines the current known distribution of the species throughout the range of the Amazon Rainforest. 'Activity period' was based on the known periods of the day when the species is active and includes 'diurnal', 'nocturnal', and 'cathe-merial'. 'Microhabitat preference' was based on the more specific location species were collected or are commonly known to inhabit. The criteria used to classify the species for 'terrestrial', 'arboreal', 'aquatic' and 'fossorial' are the same as 'habitat preference' with the exception that 'terrestrial' primarily included species known to live in leaf litter and fallen tree debris. Season collected was derived from the date provided from the database; 'dry' was defined as between 1st July to 31st December, and 'rainy' was defined as between 1st January to 30th June (Lisboa 1999; Fisher et al., 2006; Pinto, Confalonieri & Mascarenhas, 2009); species with equal individuals for each season were classes as 'even'. For 'body size', 'small' was defined as less than 50 mm, 'medium' as 50-99 mm and 'large' as species which have been known to grow over 100 mm.

2.3. Plotting the distribution of species sampled

Point distribution maps were created using QGIS based on available Global Positioning System (GPS) data, using Google Satellite as a base map because Caxiuanã River and its tributaries had greater visibility. However, GPS data were lacking or incorrect for 1389 records (75.6% of total individuals, $n=1838$). To account for this, estimated GPS coordinates were input based on location, habitat and microhabitat information that was available. For example, for individuals located on the Igarapé Curuá in terra firme habitat and a microhabitat of leaf litter, it was predicted that the record was found outside of riparian zones along the Igarapé Curuá. GPS coordinates along common trials used in Caxiuanã were collected and used as base coordinates for some of these estimations. From these coordinates, distance from closest large water body was estimated using the ruler tool in QGIS on a Google Earth base map; distance from large water body was used as smaller rivers could not be accurately seen. 'Correct' and 'estimate' GPS coordinates were separated by colour in the maps used in this research (blue and red respectively).

2.4. Statistical analysis

Abundance was quantified as the number of individuals while relative abundance was quantified as the number of individuals divided by the total number of individuals for the specific category (species, location, habitat, season collected etc.). Rank abundance graphs were created in Microsoft Excel 2017 using relative abundance for each species for northern and southern communities and all four assemblages. (Appendices 4, 5 & 6). A Pareto chart was created in Excel using the abundance data to visualise dominance in Caxiuanã. Simpson's inverse diversity index was calculated using the formula shown in figure 5 for the overall diversity of Caxiuanã, the diversity for each community north and south of the Caxiuanã River and for all four assemblages studied. Distance from the largest water source for individuals was presented in an ordination graph in Excel.

$$D = 1 - \left(\frac{\sum n(n-1)}{N(N-1)} \right)$$

Figure 5. Simpson's inverse diversity index formula

EstimateS version 9.1.0 (Colwell, 2012) was used to compute diversity statistics. The data were input as multiple individual-based abundance samples. Sample-based input was not chosen because the methodology used by the collectors was not known for all individuals. Diversity was calculated for all individuals, separately for individuals recorded north and south of the Caxiuanã river, and then again for the four separate assemblages. The following diversity settings were used for all runs of the data: 1000 randomisations, extrapolation for rarefaction by total number of individuals, estimation points (knots) at every individual, diversity indices computed, bias-corrected formula for Chao 1 and Chao 2, coverage-based estimators set as ten, randomised individuals without replacement; the remaining options under the 'other options tab' were left to default settings. Once computed, the output file was exported into Excel to create graphs with the relevant information. Individual-based rarefaction curves were created using 'S Mean (runs)' to plot the observed species, using Chao 1 (Chao, 1984) as the primary species richness estimator. 'S Mean (runs)' is the number of species represented among m (total number of samples) individuals, given the reference sample (mean among runs Colwell, 2012); in other words, it is equal to the observed species. The rarefactions methods are adequate to estimate species richness and comparisons among data sets with different numbers of individuals (Gotelli & Colwell, 2001). In addition,

graphs with both upper and lower 95% confidence for S (mean) runs and for Chao 1 were created to show the confidence levels of the results. The results for Simpson's inverse index were used to create graphs in Excel to visualise the diversity in Caxiuanã overall, between the northern and southern communities and between the four assemblages.

The software PAST 3 (Hammer, Harper & Ryan, 2001) was used to compute the diversity indices. The data were input into columns for the northern and southern communities and for all four assemblages with the total amount of individuals for each species recorded to the relevant location. EstimateS was also used for comparison.

Simpson's inverse index (D) is a compound index combining measures of richness and abundance (Morris et al., 2014), measuring the probability that two individuals randomly selected from a sample will belong to a different species or category. The value of D ranges from 0 (low species richness and diversity) to 1 (high species richness and diversity, Smith & Smith, 2009). The Simpson's diversity index is superior than the more commonly used Shannon index, as fewer individuals are needed for comparative purposes (Lande, DeVries & Walla, 2000; Magurran, 2013), also providing more accurate measures of evenness (Morris et al., 2014; Hammer, 2018). Lande, DeVries & Walla (2000) further found that the Simpson's index is more effective than species accumulation curves in ranking communities. In addition, D can be used as a measure of dominance (Smith & Smith, 2009). Fisher's alpha diversity has been supported by many papers, even when the log series distribution is not the best descriptor of the species abundance pattern (Magurran, 2013), and was used as a further diversity measure. Moraes et al. (2016) stated that Simpson's diversity indices should be used to compute evenness rather than Shannon's index. Thus, Buzas and Gibson's evenness ($\text{Evenness}_{e^H/S}$) and Equitability (Equitability_J) were removed because the formulae involve the use of Shannon Index (H). The Menhinick and Margalef indices were removed from analysis because of redundancy of species richness estimators, and Berger-Parker was removed for redundancy of a dominance measure.

Chao 1 (Chao, 1984) is a nonparametric species richness estimator based on the number of rare species (singletons and doubletons) in a sample, with increased frequency of singletons leading to greater species richness once all species in the sample are equal to two individuals, the inventory can be considered complete (Coddington et al., 1996; Magurran,

2013). Chao 1 was chosen as the main species richness estimator as it has been demonstrated to have high precision, negligible standard deviations and a low bias when compared against other species richness estimations (Walther & Martin, 2001; Magurran, 2013; Hortal, Borges & Gaspar, 2006).

IBM SPSS Statistics with Python 3.4 was used to test if life-history traits and guilds had any significant effect on the distribution of species. The data were input as a series of numbers which were labelled in the variable view of SPSS. Overall five life-history traits and categories (location, habitat preference, microhabitat preference, aquatic reproductive type, and activity period) were analysed using a Chi-square test with bootstrapping (1000 randomisations), comparing the selected traits against the total species and individuals.

‘Location’ was chosen from the data categories of anuran sampled because it separates the four assemblages defined in this research, and would demonstrate if locality was significant for species distribution. ‘Habitat preference’ and ‘microhabitat preference’ were chosen as important traits because they play a role in anuran distribution as described above. ‘Aquatic reproductive type’ was included because it is more specific than ‘reproductive type’ as many aquatically reproducing anurans have a wide range and definition of a reproductive mode. ‘Activity period’ was included to determine differences between distribution and nocturnal or diurnal species.

3.0. Results

3.1. Data processing

A total of 1838 individual records distributed across 11 families, 25 genera and 48 species were used for analyses (Table 1), reduced from 2694 individuals, 14 families, 31 genera and 74 species (taxonomic reductions are discussed in chapter 3.2). Data among the categories for the individuals were unevenly distributed, due to lack of data. Therefore, overall totals for tables 2-5 are under the total of individuals used for analysis ($n=1838$) and the total number of individuals before processing ($n=2694$). Table 2 shows the relative abundance without data deficient individuals and the relative abundance when compared to the overall total individuals ($n = 1838$). The data were refined into fewer categories for location, habitat and microhabitat for statistical analyses (Table 3, 4 & 5). Originally, ‘location’ consisted of 12 entries (Caxiuanã bay, Igarapé Abacaxis, Igarapé Anapú, Igarapé Arauá, Igarapé Curuá,

Igarapé Curuáxinho, Igarapé Grande, Igarapé Laranjal, Igarapé Santa Cruz, Igarapé Tijucaquara, PPBIO plot, Caxiuanã River, and Empty). The single individual located at Igarapé Abacaxis was removed from any analysis involving location, habitat, microhabitat due to insufficient data; Igarapé Anapú is a small river located close to the IBAMA base, and all individuals were therefore changed to IBAMA. Igarapé Arauá is a small tributary of the Caxiuanã River, and all individuals were classed under Igarapé Curuá. Igarapé Curuáxinho is a small river connected to the Igarapé Curuá, and the single individual found in this location was therefore classed under Igarapé Curuá. All Igarapé Grande individuals were changed to Igarapé Curuá. Individuals located at Igarapé Laranjal were not changed. Igarapé Santa Cruz is a small river close to IBAMA, and both individuals were changed to IBAMA. Igarapé Tijucaquara individuals were changed to Igarapé Curuá. All individuals located in the PPBIO plot were not changed. The single individual found in Caxiuanã River was described as being found close to IBAMA in the field notes, and therefore was changed to IBAMA. All locations can be found in Figure 4, except for Igarapé Abacaxis, Igarapé Anapú, and Igarapé Santa Cruz, where the specific location of these tributaries could not be specified. All location information can be seen in Table 3. For the reduction of 'habitat' information (Table 4), 'anthropogenic' was removed from the analysis, and Baixio, Capoeira, Igapó, terra firme and Várzea were retained. Mata was changed to terra firme. Mata, Baixio, terra firme/Igapó, and terra firme/Várzea were classed as terra firme unless relevant field notes of the individuals stated that the other habitat type was more dominant. Individuals with no information for habitat were removed from this analysis. Definitions of the habitat types can be found in Table 4. For the reduction of 'microhabitat' data (Table 5), 'aquatic vegetation', 'litter', 'high vegetation' and 'low vegetation' were retained. 'Forest floor', 'MTF/litter' and 'trap' were classed under 'litter' as all individuals were collected from the forest floor including those from pitfall traps, while those from drift fences were removed. Those listed as 'empty' were removed due to insufficient data. Definition of the habitat types can be found in Table 5. The differences between Tables 3, 4 and 5 is due to modifications based on information gained from the field notes and from the removal of all individuals described in Chapter 3.2. Sampled data were unevenly distributed throughout the sample period with no individuals in the database for 2006, 2008, 2010 and 2011. 1991, 1994, 1995, 1999, 2001, 2003, 2005 and 2009 had less than a total of ten individuals recorded. The data set including the original location, habitat, and microhabitat data of individuals can be found in Appendix 7.

Table 1. The number of individuals and relative abundance of species collected in Caxiuanã and used in the analysis.

Family	Genus	Species	Individual total	Relative abundance (%)
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	52	2.83%
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	59	3.21%
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	343	18.66%
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	458	24.92%
Bufonidae	<i>Rhinella</i>	<i>marina</i>	16	0.87%
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	1	0.05%
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	37	2.01%
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	69	3.75%
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	139	7.56%
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	24	1.31%
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	11	0.60%
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	4	0.22%
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	18	0.98%
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	0.16%
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	2	0.11%
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	0.54%
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	7	0.38%
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	2	0.11%
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	1	0.05%
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	1	0.05%
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	20	1.09%
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	14	0.76%
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	8	0.44%
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	13	0.71%
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	1	0.05%
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	9	0.49%
Hylidae	<i>Scinax</i>	<i>boesemani</i>	10	0.54%
Hylidae	<i>Scinax</i>	<i>garbei</i>	4	0.22%
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	23	1.25%
Hylidae	<i>Scinax</i>	<i>ruber</i>	23	1.25%

Table 1 continued

Family	Genus	Species	Individual total	Relative abundance (%)
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0.05%
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	1	0.05%
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	6	0.33%
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	72	3.92%
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	75	4.08%
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	26	1.41%
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	31	1.69%
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	17	0.92%
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	0.11%
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	26	1.41%
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	5	0.27%
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	3	0.16%
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	1	0.05%
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	52	2.83%
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	116	6.31%
Pipidae	<i>Pipa</i>	<i>pipa</i>	12	0.65%
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	9	0.49%
Total individuals			1838	100.00%
Total species			48	

Table 2. Overall summary of the amount, specific relative abundance (specific to the relevant category) and overall relative abundance (relative to the total number of individuals collected, $n = 1838$) of individuals for location, habitat, microhabitat and season collected.

Location	Total (<i>n</i>)	Specific relative abundance (%)	Overall Relative abundance (%)
Igarapé Curuá	533	29.21%	29.00%
Igarapé Laranjal	203	11.12%	11.04%
PPBIO plot	1033	56.60%	56.20%
IBAMA	40	2.19%	2.18%
Other	16	0.88%	0.87%
Total	1825	100.00%	99.29%
Habitat	Total (<i>n</i>)	Relative abundance (%)	Relative abundance to total individuals ($n =$ 1838) (%)
Baixio	16	1.09%	1.09%
Capoeira	124	8.48%	6.75%
Igapó	71	4.86%	3.86%
Terra firme	1239	84.75%	67.41%
Várzea	12	0.82%	0.65%
Total	1462	100.00%	79.54%
Microhabitat	Total (<i>n</i>)	Relative abundance (%)	Relative abundance to total individuals ($n =$ 1838) (%)
Aquatic vegetation	42	6.74%	2.29%
High vegetation	16	2.57%	0.87%
Litter	536	86.04%	29.16%
Low vegetation	29	4.65%	1.58%
Total	623	100.00%	33.90%
Season collected	Total (<i>n</i>)	Relative abundance (%)	Relative abundance to total individuals ($n =$ 1838) (%)
Rainy	1218	66.41%	66.27%
Dry	616	33.59%	33.51%
Total	1834	100.00%	99.78%

Table 3. Results for the location where individuals were collected and the modified results after reduction. 'Igarapé' refers to a smaller river, while 'Rio' refers to a larger river Figure 4, shows the majority of rivers in Caxiuanã. Raw data are shown in Appendix 7.

Unmodified - location	Total (n)	Relative abundance (%)	Modified - location	Total (n)	Relative abundance (%)
Caxiuanã bay	67	2.56%	Igarapé Curuá	533	29.21%
Igarapé Abacaxis	1	0.04%	Igarapé Laranjal	203	11.12%
Igarapé Anapú	39	1.49%	PPBIO plot	1033	56.60%
Igarapé Arauá	137	5.23%	IBAMA	40	2.19%
Igarapé Curuá	484	18.47%	Other	16	0.88%
Igarapé Curuáxinho	1	0.04%	Total	1825	100.00%
Igarapé Grande	10	0.38%			
Igarapé Laranjal	254	9.69%			
Igarapé Santa Cruz	2	0.08%			
Igarapé	1	0.04%			
Tijucaquara					
PPBIO plot	1389	53.02%			
Caxiuanã river	1	0.04%			
Empty	233	8.89%			
Total	2620	100.00%			

Table 4. Results for the habitat where individuals were collected and modified results after reduction. 'Anthropogenic' refers to any man-made sites where individuals were collected, 'Baixio' here is classed as lowland, usually flooded habitat, 'Capoeira' is defined as secondary forest, 'Igapó' is classed as black-water flooded forest, while 'Várzea' is classed as white-water flooded forest, 'Mata' refers primarily to Terra firme forest but also primary forest. Ulisses Galatti provided the descriptions of the Portuguese definitions.

Unmodified - habitat	Total (n)	Relative abundance (%)	modified - habitat	Total (n)	Relative abundance (%)
Anthropogenic	23	0.88%	Baixio	16	1.09%
Baixio	10	0.38%	Capoeira	124	8.48%
Capoeira	169	6.45%	Igapó	71	4.86%
Igapó	62	2.37%	Terra firme	1239	84.75%
Mata	224	8.55%	Várzea	12	0.82%
Mata, Baixio	12	0.46%	Total	1462	100.00%
Terra firme	1585	60.50%			
Terra firme/Igapó	20	0.76%			
Terra firme/Várzea	7	0.27%			
Várzea	10	0.38%			
Empty	498	19.01%			
Total	2620	100.00%			

Table 5. Results for the microhabitat in which individuals were collected, and modified results after data reduction. 'Aquatic vegetation' was defined as any vegetation partially submerged in water. 'Forest floor' refers to individuals collected on the forest floor. 'High vegetation' refers to individuals recorded above shrub level height. 'Litter' refers to individuals collected on or within leaf litter on the forest floor. 'Low vegetation' refers to individuals collected on vegetation collected at shrub level height or below. 'MTF/Litter' refers to leaf litter in terra firme forest. 'Other' referred to individuals recorded with specific information such as 'under fallen tree' or 'shallow pool with litter'. 'Trap' primarily referred to pitfall traps but also included drift fence traps. Ulisses Galatti provided the descriptions of the Portuguese definitions.

Unmodified - Microhabitat	Total (n)	Relative abundance (%)	Modified - microhabitat	Total (n)	Relative abundance (%)
Aquatic vegetation	42	1.60%	Aquatic vegetation	42	6.74%
Forest floor	51	1.95%	High vegetation	16	2.57%
High vegetation	16	0.61%	Litter	536	86.04%
Litter	300	11.45%	Low vegetation	29	4.65%
Low vegetation	27	1.03%	Total	623	100.00%
MTF/Litter	86	3.28%			
Other	4	0.15%			
Trap	679	25.92%			
Empty	1415	54.01%			
Total	2620	100.00%			

Data were split into three sections for analysis: overall total ($n=1838$), north and south of the Caxiuanã River ($n=1825$, 13 individuals were data deficient) and the four assemblages (Curuá, Laranjal, PPBIO, IBAMA, $n=1809$, 16 more individuals listed in 'other', all were *Adelphobates galactonotus* and located furthest south of the region, east of PPBIO, Appendix 8).

All species collected were categorised among nine life histories traits and collection categories (Table 6 & 7, Figure 6). The most common category under 'habitat preference' was 'terrestrial' with 47.92% of the total species. 52.08% of species were classes as 'riparian'. Under 'reproductive type', 'aquatic' was the most dominant form of reproduction

with 89.58% of the species. Under 'aquatic reproductive type', 'lentic' accounted for 64.58% of the total species. 'Widely distributed' was common under 'distribution in Amazonia', with 77.78% of the total species. Under 'activity period', 'nocturnal' accounted for 81.25% of species. With 45.83% 'arboreal' accounted for the majority of species under 'microhabitat'. Most of the species (68.75%) were collected during the 'dry' period, and with 54.17% of records the most common category under 'body size' was 'small'. When analysing the significance of the life-history traits for the sampled anuran species in Caxiuanã, the distribution of species was significantly uneven across all categories with a p-value of < 0.001 (Appendix 9).

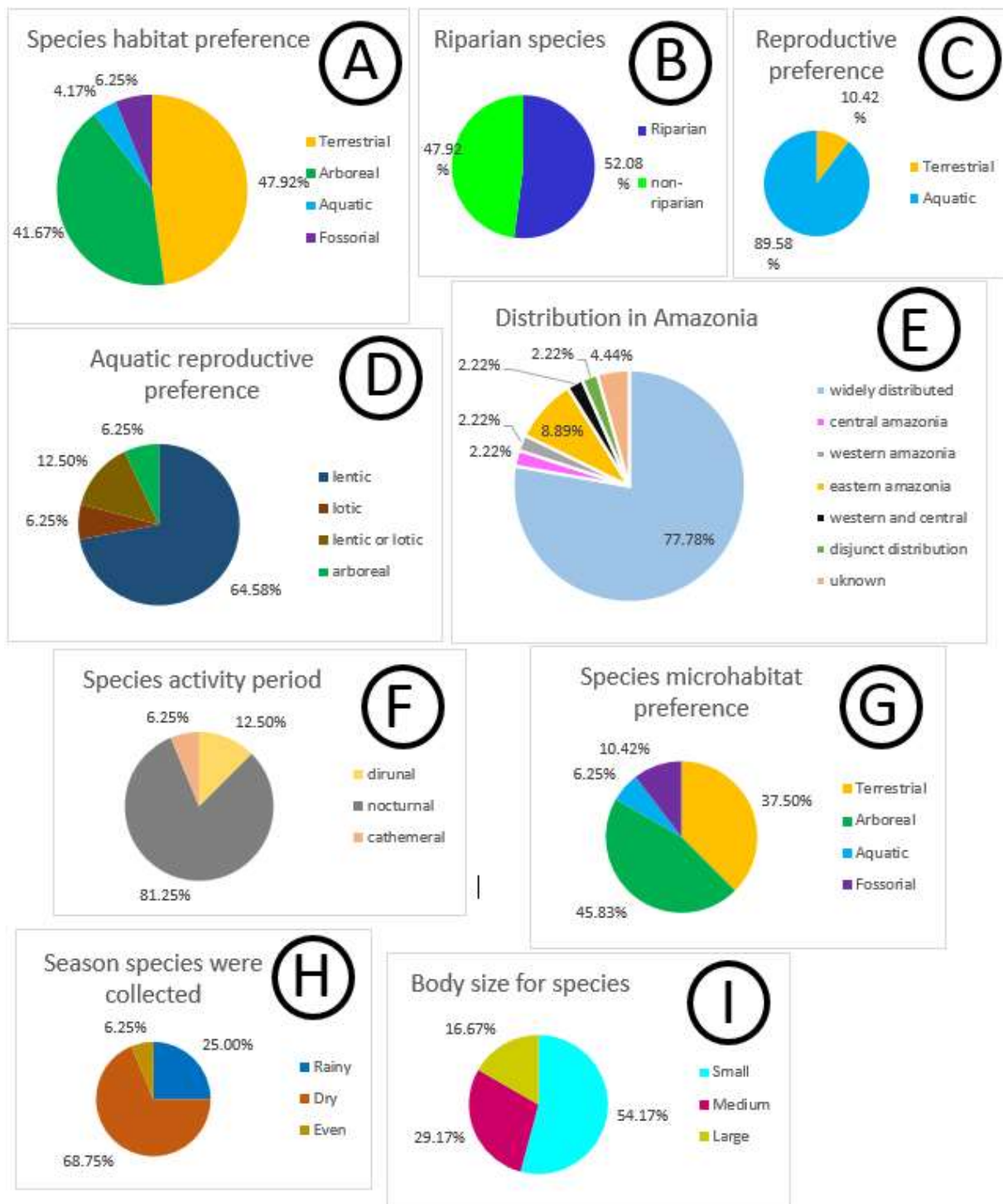


Figure 6 – Total percentages of individuals in each life history categories. A = species habitat preferences, B = riparian species, C = reproductive preference, D= Aquatic reproductive preference, E = distribution in Amazonia, F = species activity period, G species microhabitat preference, H – season species were collected, I = body size for species.

Table 6. Life-history traits and categories for the study species of this research.

Family	Genus	Species	Habitat preference	Riparian (yes/no)	Reproductive type	aquatic reproductive type	known distribution in Amazonia	activity period	Micro-habitat	Season collected	Body size
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	Terrestrial	No	Aquatic	lentic	widely distributed	diurnal	terrestrial	Rainy	small
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	Terrestrial	No	Aquatic	lentic	unknown	diurnal	terrestrial	Dry	small
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	Terrestrial	No	Aquatic	lentic	central Amazonia	diurnal	terrestrial	Dry	small
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Terrestrial	No	Terrestrial	terrestrial	widely distributed	diurnal	terrestrial	Rainy	medium
Bufonidae	<i>Rhinella</i>	<i>marina</i>	Terrestrial	No	Aquatic	lentic/lotic	widely distributed	nocturnal	terrestrial	Dry	large
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	Terrestrial	Yes	Aquatic	lentic/lotic	western and central	nocturnal	arboreal	Rainy	small
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	Terrestrial	No	Aquatic	lentic	widely distributed	nocturnal	terrestrial	Rainy	medium
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	Terrestrial	No	Terrestrial	terrestrial	widely distributed	nocturnal	terrestrial	Rainy	small
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Terrestrial	No	Aquatic	lentic	eastern Amazonia	diurnal	terrestrial	Rainy	small

Table 6 continued

Family	Genus	Species	Habitat preference	Riparian	Reproductive type	Aquatic reproductive type	Known distribution in Amazonia	Activity period	Micro- habitat	Season collected	Body size
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	Terrestrial	No	Aquatic	arboreal	disjunct distribution	diurnal	arboreal	Rainy	small
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	Arboreal	No	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	small
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	Arboreal	No	Aquatic	lentic	eastern Amazonia	nocturnal	arboreal	Even	small
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	Arboreal	Yes	Aquatic	lentic	unknown	nocturnal	arboreal	Rainy	small
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	small
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	Arboreal	Yes	Aquatic	lentic/lotic	widely distributed	nocturnal	arboreal	Dry	large
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	small
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	Arboreal	Yes	Aquatic	lentic/lotic	widely distributed	nocturnal	arboreal	Rainy	medium
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	Arboreal	No	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	medium
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	Arboreal	No	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	medium

Table 6 continued

Family	Genus	Species	Habitat preference	Riparian	Reproductive type	Aquatic reproductive type	Known distribution in Amazonia	Activity period	Micro- habitat	Season collected	Body size
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	Arboreal	No	Aquatic	lentic/lotic	widely distributed	nocturnal	arboreal	Dry	medium
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	Arboreal	Yes	Aquatic	lotic	widely distributed	nocturnal	arboreal	Dry	large
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Aquatic	Yes	Aquatic	lotic	north/central of the Amazon River	catemeral	aquatic	Rainy	small
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	Arboreal	No	Aquatic	arboreal	north Amazonia	nocturnal	arboreal	Dry	small
Hylidae	<i>Osteocephalus</i>	<i>taurus</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	large
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Dry	small
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Dry	medium
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	small
Hylidae	<i>Scinax</i>	<i>garbei</i>	Arboreal	Yes	Aquatic	lentic	widely distributed	nocturnal	arboreal	Even	small

Table 6 continued

Family	Genus	Species	Habitat preference	Riparian	Reproductive type	Aquatic reproductive type	Known distribution in Amazonia	Activity period	Micro-habitat	Season collected	Body size
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	Arboreal	No	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	medium
Hylidae	<i>Scinax</i>	<i>ruber</i>	Arboreal	No	Aquatic	lentic	widely distributed	nocturnal	arboreal	Rainy	small
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	Arboreal	No	Aquatic	arboreal	widely distributed	nocturnal	arboreal	Rainy	medium
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	Terrestrial	No	Terrestrial	terrestrial	widely distributed	catemeral	terrestrial	Rainy	small
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	Terrestrial	No	Aquatic	lentic	widely distributed	nocturnal	aquatic	Rainy	medium
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	Terrestrial	Yes	Aquatic	lentic	western Amazonia	nocturnal	terrestrial	Rainy	large
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	nocturnal	terrestrial	Rainy	small
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Terrestrial	Yes	Aquatic	lentic	eastern Amazonia	nocturnal	terrestrial	Rainy	large
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Terrestrial	No	Terrestrial	terrestrial	widely distributed	nocturnal	terrestrial	Rainy	large

Table 6 continued

Family	Genus	Species	Habitat preference	Riparian	Reproductive type	Aquatic reproductive type	Known distribution in Amazonia	Activity period	Micro-habitat	Season collected	Body size
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	nocturnal	terrestrial	Dry	Small
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	nocturnal	terrestrial	Rainy	medium
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	nocturnal	terrestrial	Even	medium
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	Fossorial	Yes	Aquatic	lentic	eastern Amazonia	nocturnal	terrestrial	Rainy	small
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	Terrestrial	No	Terrestrial	terrestrial	widely distributed south of Amazonia	nocturnal	fossorial	Rainy	small
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	Fossorial	Yes	Aquatic	lentic	widely distributed	nocturnal	fossorial	Rainy	small
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	cathemeral	fossorial	Dry	small
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Fossorial	Yes	Aquatic	lentic	widely distributed	nocturnal	fossorial	Rainy	medium

Table 6 continued

Family	Genus	Species	Habitat preference	Riparian	Reproductive type	Aquatic reproductive type	Known distribution in Amazonia	Activity period	Micro- habitat	Season collected	Body size
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	Terrestrial	Yes	Aquatic	lentic	widely distributed	nocturnal	fossorial	Rainy	small
Pipidae	<i>Pipa</i>	<i>pipa</i>	Aquatic	Yes	Aquatic	lotic	widely distributed	nocturnal	aquatic	Dry	large
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Terrestrial	No	Aquatic	lentic/lotic	widely distributed	nocturnal	terrestrial	Rainy	medium

Table 7. Number of species collected in Caxiuanã for each category.

Categories	Number of species
Habitat preference	
Terrestrial	23
Arboreal	20
Aquatic	2
Fossorial	3
Microhabitat	
Terrestrial	18
Arboreal	22
Aquatic	3
Fossorial	5
Riparian	
Riparian	25
Non-Riparian	23
Reproductive type	
Terrestrial	5
Aquatic	43
Aquatic reproductive type	
Lentic	31
Lentic/lotic	6
Lotic	3
Arboreal	3
Terrestrial	5
Known distribution in Amazonia	
Widely distributed	35
Central Amazonia	1
Southern Amazonia	1
Northern Amazonia	1
North/Central of Amazon River	1
Eastern Amazonia	4
Western Amazonia	1

Table 7 continued

Categories	Number of species
Western and Central Amazonia	1
Disjunct distribution	1
Unknown	2
Activity period	
Nocturnal	39
Diurnal	6
Cathemeral	3
Season collected	
Dry	12
Rainy	3
Even	33
Body size	
Small	26
Medium	14
Large	8

3.2. Taxonomic issues

During the processing of the raw data, there were several taxonomic issues. Eight individuals were caecilians and therefore removed from the analyses. Six individuals had no data recorded for species and were also removed. Other issues related to taxonomic name changes. For example, *Allobates marchesianus* was changed to *Allobates sp.* *Vitreorana oyampiensis* is now classified as *Vitreorana ritae*. *Lysapsus limellum* is now classified as *Lysapsus laevis*. *Eleutherodactylus sp.* was changed to *Pristimantis fenestratus*. *Leptodactylus labyrinthicus* was changed to *Leptodactylus paraensis*. *Leptodactylus wagneri* was changed to *Leptodactylus petersii*. *Chiasmocleis jimi* is now known as *Chiasmocleis hudsoni*. Furthermore, multiple species are now classed as a single species. For example, *Rhinella castaneotica* and *Rhinella gr. margaritifera* are now listed as *Rhinella magnussoni*. *Ranitomeya quinquevittatus* and *Ranitomeya ventrimaculata* were changed to *Rhinella amazonica*. *Dendropsophus microcephalus* and *Dendropsophus misera* were changed to

Dendropsophus minusculus. *Scinax rostratus* was merged with *Scinax nebulosus*. Nine species were only identified to genus level, eight of which were removed from analysis due to taxonomic confusion among authors. *Allobates* sp. remained in the analysis because there is less confusion to this species across the literature. All taxonomic changes were reviewed by Ulisses Galatti and Marinus S. Hoogmoed and are shown in Table 8. After the first initial data processing, such as removing samples with insufficient data and obvious taxonomic issues, the overall total number of individuals was 2620 (reduced from 2694) and the total of species was 50 (reduced from 74). Two key species that were removed from the analysis were *Adenomera andreae*, the fourth most abundant species ($n = 281$), and *Adenomera* sp. 1 which was most abundant species ($n = 503$) during this initial reduction. These species are commonly reported (Avila-Pires & Hoogmoed, 1997; Menin, Waldez & Lima, 2008; Deichmann et al., 2010; Ribeiro, Lima & Magnusson, 2012; Rojas-Ahumada et al., 2012; Fouquet et al., 2014; Dias-Terceiro et al., 2015; Moraes et al., 2016). However, after consulting with Dr Ulisses Galatti and Dr Marinus S. Hoogmoed, it was decided that due to the complex taxonomy and similar morphology of this genus (Angulo, Cocroft & Reichle, 2003) it is likely that many of these individuals were misidentified. As the only *Adenomera* individual reliably determined to species level, *A. hylaedactyla* was decided to be kept within the data analysis. This decision was based on that the individual was collected by Dr José A. R. Bernardi and Dr Reginaldo A. T. Rocha, experts within in this field who are skilled in the identification of anuran species in this area and who collected many of the individuals input into the database. This decision was also reviewed by Dr Marinus S. Hoogmoed.

Table 8. The original list of species from database and corrections made to those species.

Family	Genus	Species	Taxonomy notes
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	Correct
Aromobatidae	<i>Allobates</i>	<i>marchesianus</i>	Changed to <i>Allobates sp.</i>
Aromobatidae	<i>Colostethus</i>		Changed to <i>Allobates sp.</i>
Bufo	<i>Amazophrynella</i>	<i>bokermanni</i>	Correct
Bufo	<i>Amazophrynella</i>	<i>minuta</i>	Changed to <i>Amazophrynella bokermanni</i>
Bufo	<i>Bufo</i>		Excluded
Bufo	<i>Rhinella</i>	<i>castaneotica</i>	Changed to <i>Rhinella magnussoni</i>
Bufo	<i>Rhinella</i>	<i>gr. margaritifera</i>	Changed to <i>Rhinella magnussoni</i>
Bufo	<i>Rhinella</i>	<i>magnussoni</i>	Correct
Bufo	<i>Rhinella</i>	<i>margaritifera</i>	Changed to <i>Rhinella magnussoni</i>
Bufo	<i>Rhinella</i>	<i>marina</i>	Correct
Centrolenidae	<i>Vitreorana</i>	<i>oyampiensis</i>	Changed to <i>Vitreoeana ritae</i>
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	Correct
Craugastoridae	<i>Eleutherodactylus</i>	<i>sp.</i>	Changed to <i>Pristimantis fenestratus</i>
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	Correct

Table 8 continued

Family	Genus	Species	Taxonomy notes
Dendrobatidae	<i>Adelphobates</i>	<i>quinquevittatus</i>	Changed to <i>Rhinella amazonica</i>
Dendrobatidae	<i>Dendrobates</i>	<i>sp.</i>	Excluded
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	Correct
Dendrobatidae	<i>Ranitomeya</i>	<i>ventrimaculata</i>	Changed to <i>R. amazonica</i>
Eleutherodactylidae	<i>Eleutherodactylus</i>	<i>sp.</i>	Excluded
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	Correct
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	Correct
Hylidae	<i>Dendropsophus</i>	<i>microcephalus</i>	Changed to <i>Dendropsophus minusculus</i>
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	Correct
Hylidae	<i>Dendropsophus</i>	<i>misera</i>	Changed to <i>Dendropsophus minusculus</i>
Hylidae	<i>Dendropsophus</i>	<i>sarayacuensis</i>	Excluded
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	Correct
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	Correct
Hylidae	<i>Lysapsus</i>	<i>limellum</i>	Changed to <i>Lysapsus laevis</i>
Hylidae	<i>Osteocephalus</i>	<i>sp.</i>	Excluded
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	Correct
Hylidae	<i>Osteocephalus</i>	<i>taurus</i>	Correct

Table 8 continued

Family	Genus	Species	Taxonomy notes
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	Correct
Hylidae	<i>Phyllomedusa</i>	<i>vaillanti</i>	Correct
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Correct
Hylidae	<i>Scinax</i>	<i>garbei</i>	Correct
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	Correct
Hylidae	<i>Scinax</i>	<i>nebulsa</i>	Changed to <i>Scinax</i> <i>nebulosus</i>
Hylidae	<i>Scinax</i>	<i>rostratus</i>	Changed to <i>Scinax</i> <i>nebulosus</i>
Hylidae	<i>Scinax</i>	<i>ruber</i>	Correct
Hylidae	<i>Scinax</i>	<i>x-signatus</i>	Changed to <i>Scinax ruber</i>
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	Correct
Leptodactylidae	<i>Adenomera</i>	<i>andreae</i>	Excluded
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	Correct
Leptodactylidae	<i>Adenomera</i>	<i>sp. 1</i>	Excluded
Leptodactylidae	<i>Adenomera</i>	<i>sp.2</i>	Excluded
Leptodactylidae	<i>Eleutherodactylus</i>	<i>sp.</i>	Changed to <i>Pristimantis</i> <i>fenestratus</i>
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	Correct
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	Correct
Leptodactylidae	<i>Leptodactylus</i>	<i>labyrinthicus</i>	Changed to <i>Leptodactylus</i> <i>paraensis</i>
Leptodactylidae	<i>Leptodactylus</i>	<i>melanotus</i>	Excluded
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Correct
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Correct
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Correct

Table 8 continued

Family	Genus	Species	Taxonomy notes
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Correct
Leptodactylidae	<i>Leptodactylus</i>	<i>wagneri</i>	Changed to <i>Leptodactylus</i> <i>petersii</i>
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	Correct
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	Correct
Microhylidae	<i>Chiasmocleis</i>	<i>sp.</i>	Excluded
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	Correct
Microhylidae	<i>Chiasmocleis</i>	<i>bassleri</i>	Correct
Microhylidae	<i>Chiasmocleis</i>	<i>jimi</i>	Changed to <i>Chiasmocleis</i> <i>hudsoni</i>
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	Excluded
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Correct
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	Correct
Pipidae	<i>Pipa</i>	<i>pipa</i>	Correct
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Correct

3.3. Assemblages across all studied areas combined

The distribution for the collected anuran individuals is shown in Figure 7. There was a distinct dominance among the species collected in Caxiuanã (Table 9, Figure 8), with four species (*R. magnussoni*, 24.92%; *Amazophrynella bokermanni*, 18.66%; *A. galactonus*, 7.56%; *Hamptophryne boliviana*, 6.31%) accounting for 57.45% of the total abundance of individuals while the remaining 44 species accounted for 42.55%. Using the Simpsons diversity index (Figure 4), the overall diversity of Caxiuanã was $1-D = 0.88$ (see Appendix 6 for equations used). This indicates that Caxiuanã has a high overall diversity.

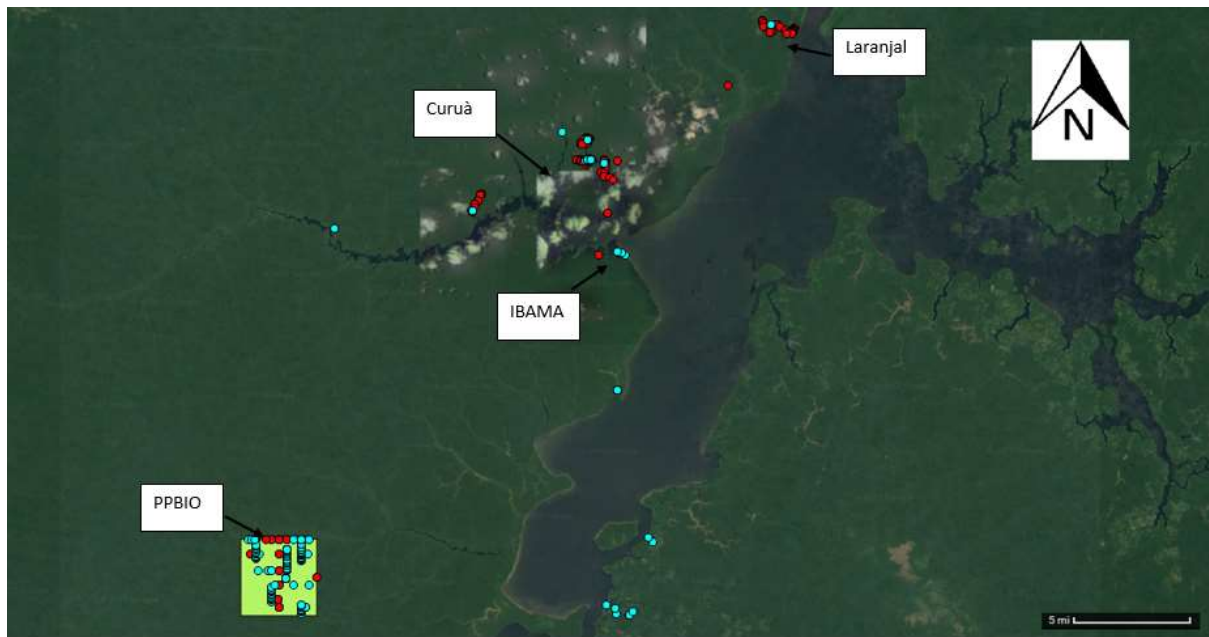


Figure 7. Locations of all individuals sampled with sufficient data provided. Blue points represent correct coordinates, red points represent estimated coordinates, both based from GPS data.

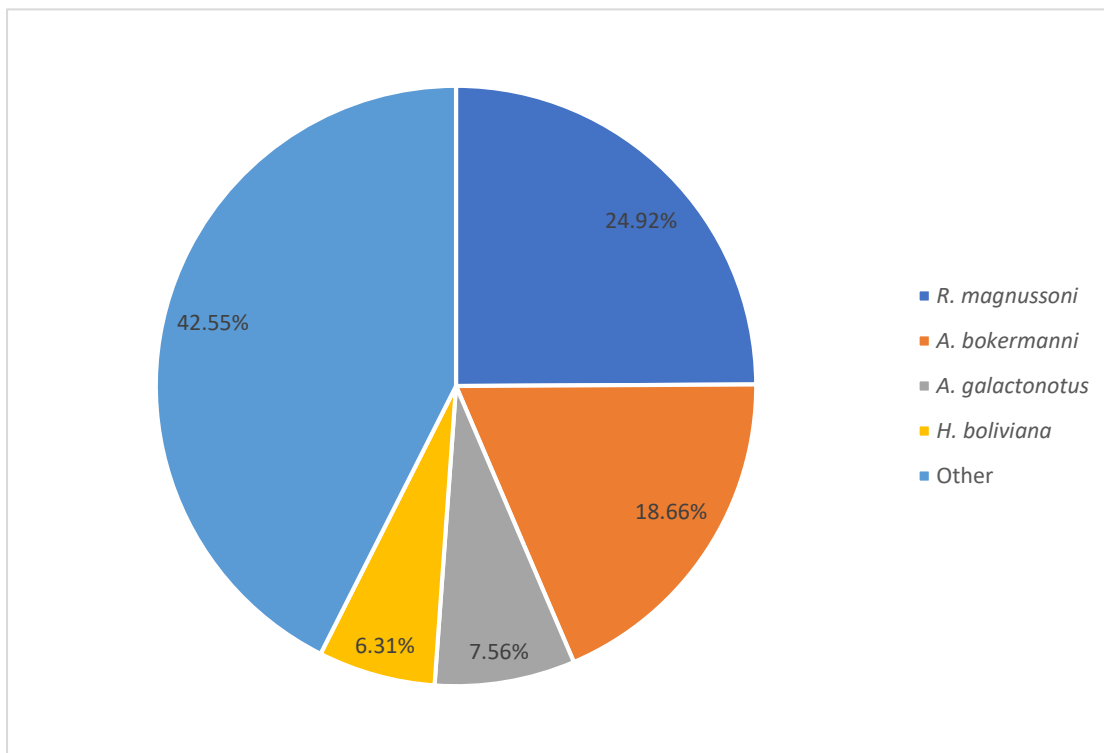


Figure 8 – Total percentage of the four most common species when compared to the other 44 species.

Table 9. Rank order of all the species collected.

Family	Genus	Species	Individual total	Relative abundance (%)
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	458	24.92%
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	343	18.66%
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	139	7.56%
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	116	6.31%
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	75	4.08%
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	72	3.92%
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	69	3.75%
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	59	3.21%
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	52	2.83%
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	52	2.83%
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	37	2.01%
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	31	1.69%
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	26	1.41%
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	26	1.41%
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	24	1.31%
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	23	1.25%
Hylidae	<i>Scinax</i>	<i>ruber</i>	23	1.25%
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	20	1.09%
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	18	0.98%
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	17	0.92%
Bufonidae	<i>Rhinella</i>	<i>marina</i>	16	0.87%
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	14	0.76%
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	13	0.71%
Pipidae	<i>Pipa</i>	<i>pipa</i>	12	0.65%
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	11	0.60%
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	0.54%
Hylidae	<i>Scinax</i>	<i>boesemani</i>	10	0.54%
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	9	0.49%
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	9	0.49%
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	8	0.44%

Table 9 continued

Family	Genus	Species	Individual total	Relative abundance (%)
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	7	0.38%
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	6	0.33%
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	5	0.27%
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	4	0.22%
Hylidae	<i>Scinax</i>	<i>garbei</i>	4	0.22%
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	0.16%
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	3	0.16%
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	2	0.11%
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	2	0.11%
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	0.11%
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	1	0.05%
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	1	0.05%
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	1	0.05%
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	1	0.05%
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0.05%
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0.05%
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	1	0.05%
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	1	0.05%
Total			1838	100.00%
individuals				
Total species			48	

Using the PAST software to calculate the diversity indices of all species and individuals from the data (Table 10), the same Simpsons diversity index results were found; Simpson_1-D depicts the inverse Simpson diversity. Figure 9 demonstrates that an asymptote has not been reached for observed species, with Chao 1 suggesting that increased sampling of anurans in Caxiuanã is needed to thoroughly assess the species richness in the area.

Table 10. Relative abundance diversity indices

	Relative abundance	Lower	Upper
Simpson_1-D	0.8777	0.8837	0.9458
Fisher_alpha	35.86	13.52	30.53
Chao-1	47	53.38	282

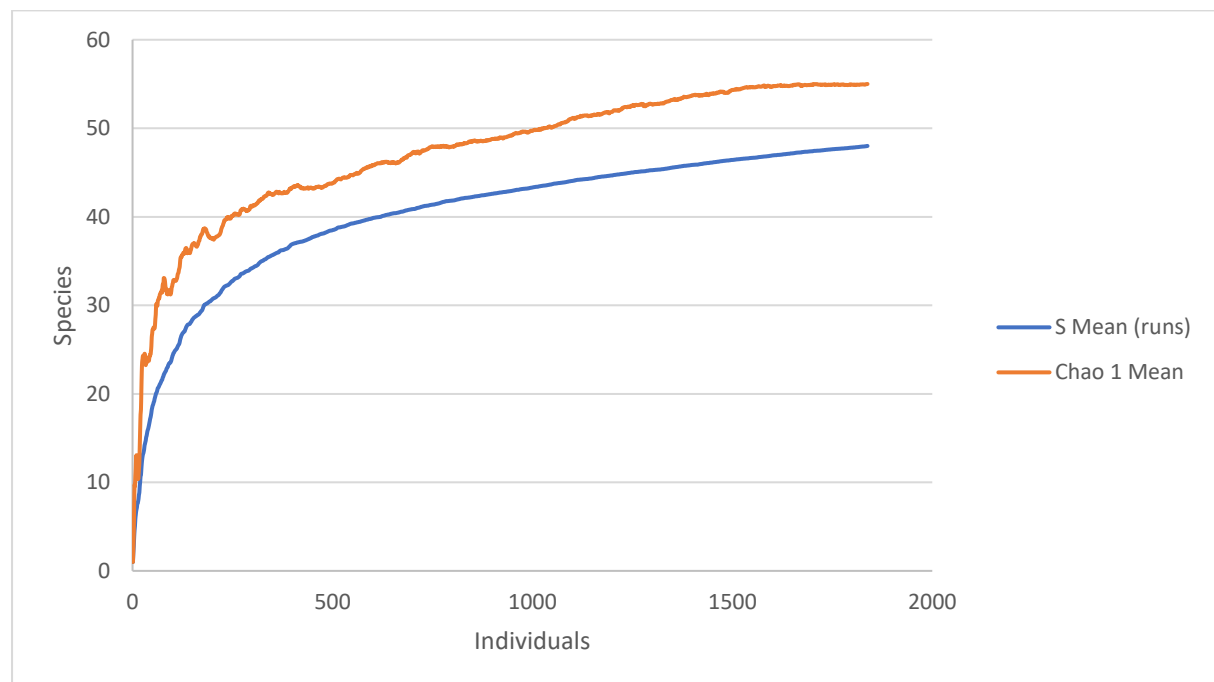


Figure 9. Individual-based rarefaction graph for all individuals collected in Caxiuanã. The blue line represents the overall species sampled while the orange shows the species richness. Values: S Mean (runs): 48; Chao 1: 55.

The distance from major water bodies from all individuals ($n=1737$, 51 data deficient), demonstrates that there are two main distances from water, close (<3 m) and far (>12 m) (figure 10). Those ‘close’ mostly relate to Curuá, Laranjal and IBAMA as they are proximate to the Caxiuanã River and the Caxiuanã bay in relation to Laranjal. While those ‘far’ are entirely consisting of individuals collected from PPBIO which has a few streams but no major water bodies.

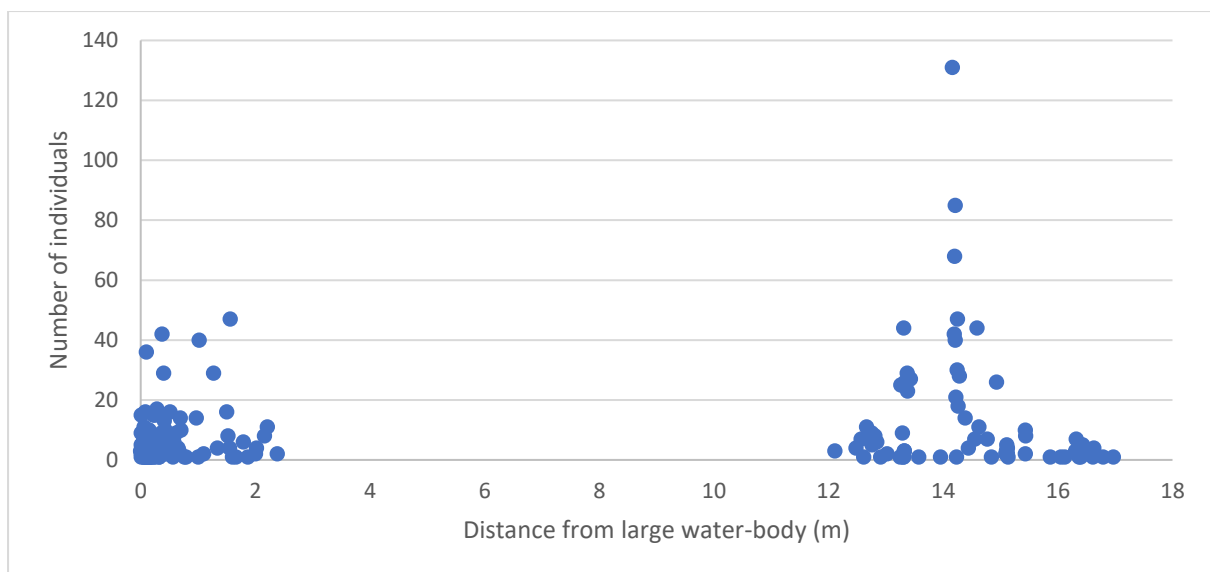


Figure 10. Distribution of individuals in relation to their proximity to large waterbodies.

3.4. River communities

There was a marked difference in species richness and abundance between north and south of the Caxiuanã River (Table 11). Overall abundance of individuals for both communities was 1825 individuals across 48 species. The three most abundance species north of the Caxiuanã River are *A. bokermanni* ($n = 243$), *R. magnussoni* ($n = 119$), and *A. galactonus* ($n = 68$). The three most abundant species south of the Caxiuanã River are *R. magnussoni* ($n = 338$), *H. boliviana* ($n = 116$), and *A. bokermanni* ($n = 97$). Fifteen species were only collected in northern Caxiuanã and nine were only collected in southern Caxiuanã (Table 12). Most notably *H. boliviana* was the second most abundant species collected south of the river, although no individuals were collected in northern Caxiuanã.

Table 11. The total number of species, individuals, relative abundance percentages for northern and southern Caxiuanã communities (relative to overall totals of each community) and relative abundance percentages for both communities. Genus level data are followed by species level data.

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
Aromobatidae	33	4.48	1.81	78	7.16	4.27	111	6.08
<i>Allobates</i>	33	4.48	1.81	78	7.16	4.27	111	6.08
<i>A. femoralis</i>	19	2.58	1.04	33	3.03	1.81	52	2.85
<i>A. sp.</i>	14	1.90	0.77	45	4.13	2.47	59	3.23
Bufonidae	370	50.27	20.27	442	40.59	24.22	812	44.49
<i>Amazophrynella</i>	243	33.02	13.32	97	8.91	5.32	340	18.63
<i>A. bokermanni</i>	243	33.02	13.32	97	8.91	5.32	340	18.63
<i>Rhinella</i>	127	17.26	6.96	345	31.68	18.90	472	25.86
<i>R. magnussoni</i>	119	16.17	6.52	338	31.04	18.52	457	25.04
<i>R. marina</i>	8	1.09	0.44	7	0.64	0.38	15	0.82
Centrolenidae	0	0.00	0.00	1	0.09	0.05	1	0.05
<i>Vitreorana</i>	0	0.00	0.00	1	0.09	0.05	1	0.05
<i>V. ritae</i>	0	0.00	0.00	1	0.09	0.05	1	0.05

Table 11 continued

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
<i>Ceratophrys</i>	1	0.14	0.05	34	3.12	1.86	35	1.92
<i>C. cornuta</i>	1	0.14	0.05	34	3.12	1.86	35	1.92
Craugastoridae	28	3.80	1.53	41	3.76	2.25	69	3.78
<i>Pristimantis</i>	28	3.80	1.53	41	3.76	2.25	69	3.78
<i>P. fenestratus</i>	28	3.80	1.53	41	3.76	2.25	69	3.78
Dendrobatidae	77	10.46	4.22	81	7.44	4.44	158	8.66
<i>Adelphobates</i>	68	9.24	3.73	67	6.15	3.67	135	7.40
<i>A. galactonotus</i>	68	9.24	3.73	67	6.15	3.67	135	7.40
<i>Ranitomeya</i>	9	1.22	0.49	14	1.29	0.77	23	1.26
<i>R. amazonica</i>	9	1.22	0.49	14	1.29	0.77	23	1.26
Hylidae	131	17.80	7.18	47	4.32	2.58	185	10.14
<i>Dendropsophus</i>	20	2.72	1.10	16	1.47	0.88	36	1.97
<i>D. leucophyllatus</i>	11	1.49	0.60	0	0.00	0.00	11	0.60
<i>D. melanargyreus</i>	4	0.54	0.22	0	0.00	0.00	4	0.22
<i>D. minusculus</i>	2	0.27	0.11	16	1.47	0.88	18	0.99
<i>D. minutus</i>	3	0.41	0.16	0	0.00	0.00	3	0.16
<i>Hypsiboas</i>	36	4.89	1.97	7	0.64	0.38	43	2.36

Table 11 continued

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
<i>H. boans</i>	0	0.00	0.00	2	0.18	0.11	2	0.11
<i>H. cinerascens</i>	10	1.36	0.55	0	0.00	0.00	10	0.55
<i>H. geographicus</i>	3	0.41	0.16	4	0.37	0.22	7	0.38
<i>H. lanciformis</i>	2	0.27	0.11	0	0.00	0.00	2	0.11
<i>H. punctatus</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>H. raniceps</i>	0	0.00	0.00	1	0.09	0.05	1	0.05
<i>H. wavrini</i>	20	2.72	1.10	0	0.00	0.00	20	1.10
<i>Lysapsus</i>	14	1.90	0.77	0	0.00	0.00	14	0.77
<i>L. laevis</i>	14	1.90	0.77	0	0.00	0.00	14	0.77
<i>Osteocephalus</i>	8	1.09	0.44	6	0.55	0.33	21	1.15
<i>O. oophagus</i>	2	0.27	0.11	6	0.55	0.33	8	0.44
<i>O. taurinus</i>	6	0.82	0.33	7	0.64	0.38	13	0.71
<i>Phyllomedusa</i>	8	1.09	0.44	2	0.18	0.11	10	0.55
<i>P. hypochondrialis</i>	0	0.00	0.00	1	0.09	0.05	1	0.05
<i>P. vaillantii</i>	8	1.09	0.44	1	0.09	0.05	9	0.49
<i>Scinax</i>	44	5.98	2.41	16	1.47	0.88	60	3.29

Table 11 continued

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
<i>S. boesemani</i>	10	1.36	0.55	0	0.00	0.00	10	0.55
<i>S. garbei</i>	4	0.54	0.22	0	0.00	0.00	4	0.22
<i>S. nebulosus</i>	8	1.09	0.44	15	1.38	0.82	23	1.26
<i>S. ruber</i>	22	2.99	1.21	1	0.09	0.05	23	1.26
<i>Trachycephalus</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>T. resinifictrix</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
Leptodactylidae	70	9.51	3.84	186	17.08	10.19	256	14.03
<i>Adenomera</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>A. hylaedactyla</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>Hydrolaetare</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>H. schmidtii</i>	1	0.14	0.05	0	0.00	0.00	1	0.05
<i>Leptodactylus</i>	66	8.97	3.62	160	14.69	8.77	226	12.38
<i>L. knudseni</i>	3	0.41	0.16	3	0.28	0.16	6	0.33
<i>L. mystaceus</i>	6	0.82	0.33	66	6.06	3.62	72	3.95
<i>L. paraensis</i>	17	2.31	0.93	58	5.33	3.18	75	4.11
<i>L. pentadactylus</i>	10	1.36	0.55	15	1.38	0.82	25	1.37

Table 11 continued

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
<i>L. petersii</i>	24	3.26	1.32	7	0.64	0.38	31	1.70
<i>L. rhodomystax</i>	6	0.82	0.33	11	1.01	0.60	17	0.93
<i>Lithodytes</i>	2	0.27	0.11	0	0.00	0.00	2	0.11
<i>L. lineatus</i>	2	0.27	0.11	0	0.00	0.00	2	0.11
<i>Physalaemus</i>	0	0.00	0.00	26	2.39	1.42	26	1.42
<i>P. ephippifer</i>	0	0.00	0.00	26	2.39	1.42	26	1.42
Microhylidae	7	0.95	0.38	9	0.83	0.49	177	9.70
<i>Chiasmocleis</i>	0	0.00	0.00	9	0.83	0.49	9	0.49
<i>C. avilapiresae</i>	0	0.00	0.00	5	0.46	0.27	5	0.27
<i>C. hudsoni</i>	0	0.00	0.00	3	0.28	0.16	3	0.16
<i>C. shudikarensis</i>	0	0.00	0.00	1	0.09	0.05	1	0.05
<i>Ctenophryne</i>	7	0.95	0.38	45	4.13	2.47	52	2.85
<i>C. geayi</i>	7	0.95	0.38	45	4.13	2.47	52	2.85
<i>Hamptophryne</i>	0	0.00	0.00	116	10.65	6.36	116	6.36
<i>H. boliviana</i>	0	0.00	0.00	116	10.65	6.36	116	6.36
Pipidae	10	1.36	0.55	2	0.18	0.11	12	0.66

Table 11 continued

Species	North of Caxiuanã river	Northern relative abundance (%)	Community relative abundance (%)	South of Caxiuanã river	Southern relative abundance (%)	Community relative abundance (%)	Overall total individuals	Overall total relative abundance (%)
<i>Pipa</i>	10	1.36	0.55	2	0.18	0.11	12	0.66
<i>P. pipa</i>	10	1.36	0.55	2	0.18	0.11	12	0.66
Ranidae	9	1.22	0.49	0	0.00	0.00	9	0.49
<i>Lithobates</i>	9	1.22	0.49	0	0.00	0.00	9	0.49
<i>L. palmipes</i>	9	1.22	0.49	0	0.00	0.00	9	0.49
Total individuals	736			1089			1825	
Overall total	1825							
Total relative abundance (%)	40.33			59.67				100

Table 12. Species only collected on either side of Caxiuanã River.

Family	Genus	Species	North of Caxiuanã River (individuals)	South of Caxiuanã River (individuals)
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	0	1
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	11	0
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	4	0
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	0
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	0	2
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	0
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	2	0
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	1	0
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	0	1
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	20	0
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	14	0
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	0	1
Hylidae	<i>Scinax</i>	<i>boesemani</i>	10	0
Hylidae	<i>Scinax</i>	<i>garbei</i>	4	0
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	1	0
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	0
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	0	26
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	0	5
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	0	3
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	0	1
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	0	116
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	9	0
Total			15	9

Only one individual of Centrolenidae was recorded south of the river in PPBIO. Hylidae were more common north of the river (131 individuals, seven genera, 18 species) than south (48

individuals, four genera, ten species). Leptodactylidae were more abundant south of the river (186 individuals across two genera and seven species) compared to north of the river, with fewer individuals but more species (70 individuals across five genera and nine species). Microhylidae were more common south (170 individuals two across genera, five species) than north of the river (seven individuals across one genus, one species). Ranidae were only found north of the Caxiuanã River (nine individuals, one genus, one species).

Overall abundance was higher south of Caxiuanã River compared to north, but more species were collected north than south (Figures 11 & 12). Diversity, as measured by Simpson's inverse diversity index, was 0.85 and 0.87 north and south of the Caxiuanã River, respectively (Table 13). However, when comparing Fisher's alpha index and Chao 1 north and south of the Caxiuanã River, diversity and richness was higher in the northern community than the southern community (Table 13). Furthermore, the northern community has a Chao 1 value of 41 compared to a value of 38 for the southern community (Figure 12). When the southern community was rarefied to the same individuals as the northern community ($n = 736$), the northern community still has greater overall observed species and species richness (Figure 12). However, when analysing the 95% confidence levels after rarefaction the upper 95% confidence level for the southern community is slightly higher than the lower 95% confidence level of the northern community for observed species (Figure 13). The upper 95% confidence level for the Chao 1 means is higher for the southern community than the northern community and shows an increasing trend while the upper 95% confidence level shows a decreasing trend (Figure 14).

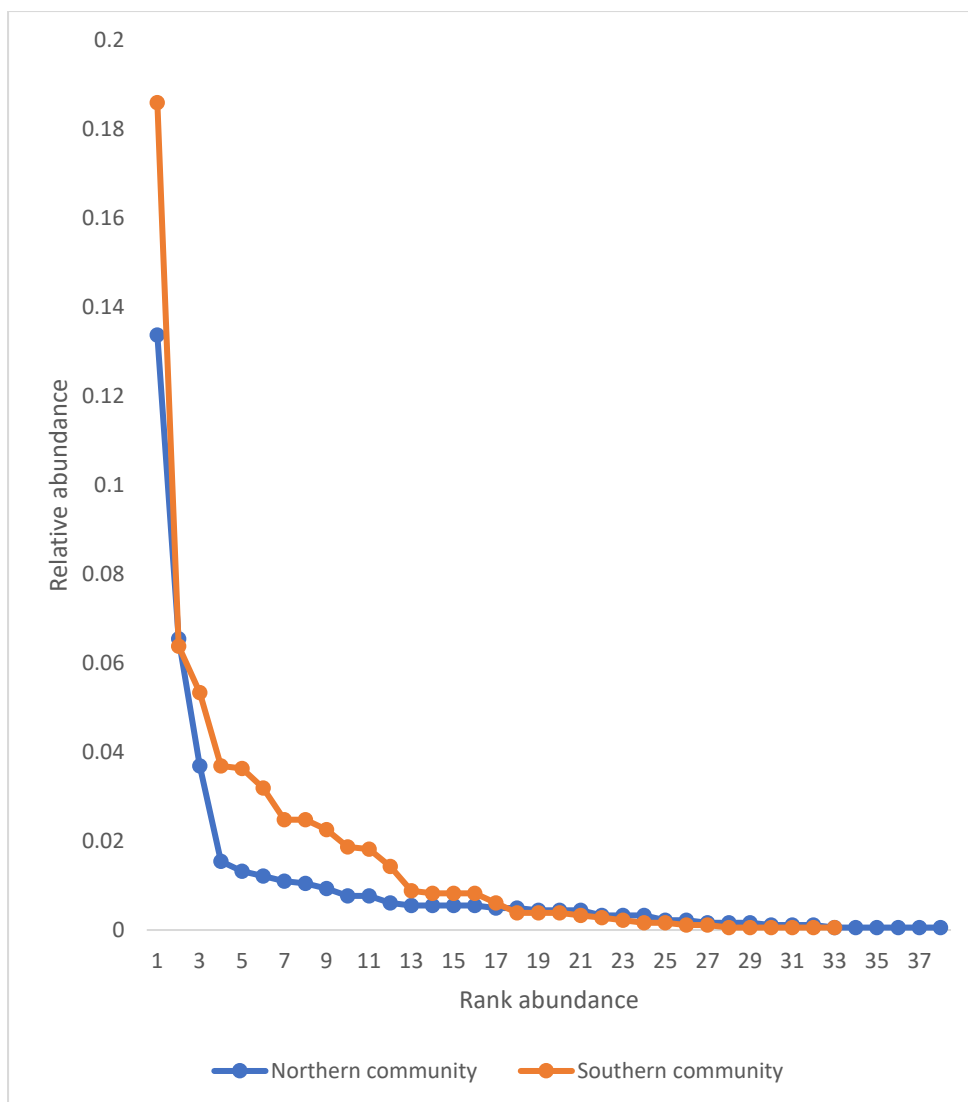


Figure 11. Rank abundance graph for communities either side of the Caxiuană river

Table 13. Diversity indices north and south of Caxiuană River. Lower and upper refer to 95% confidence levels.

	North of Caxiuană river	Lower	Upper	South of Caxiuană river	Lower	Upper
Simpson_1-D	0.848	0.8271	0.8657	0.8659	0.8507	0.8793
Fisher_alpha	8.787	8.787	8.787	6.42	6.42	6.42
Chao-1	41	39.13	51	38	33.14	47

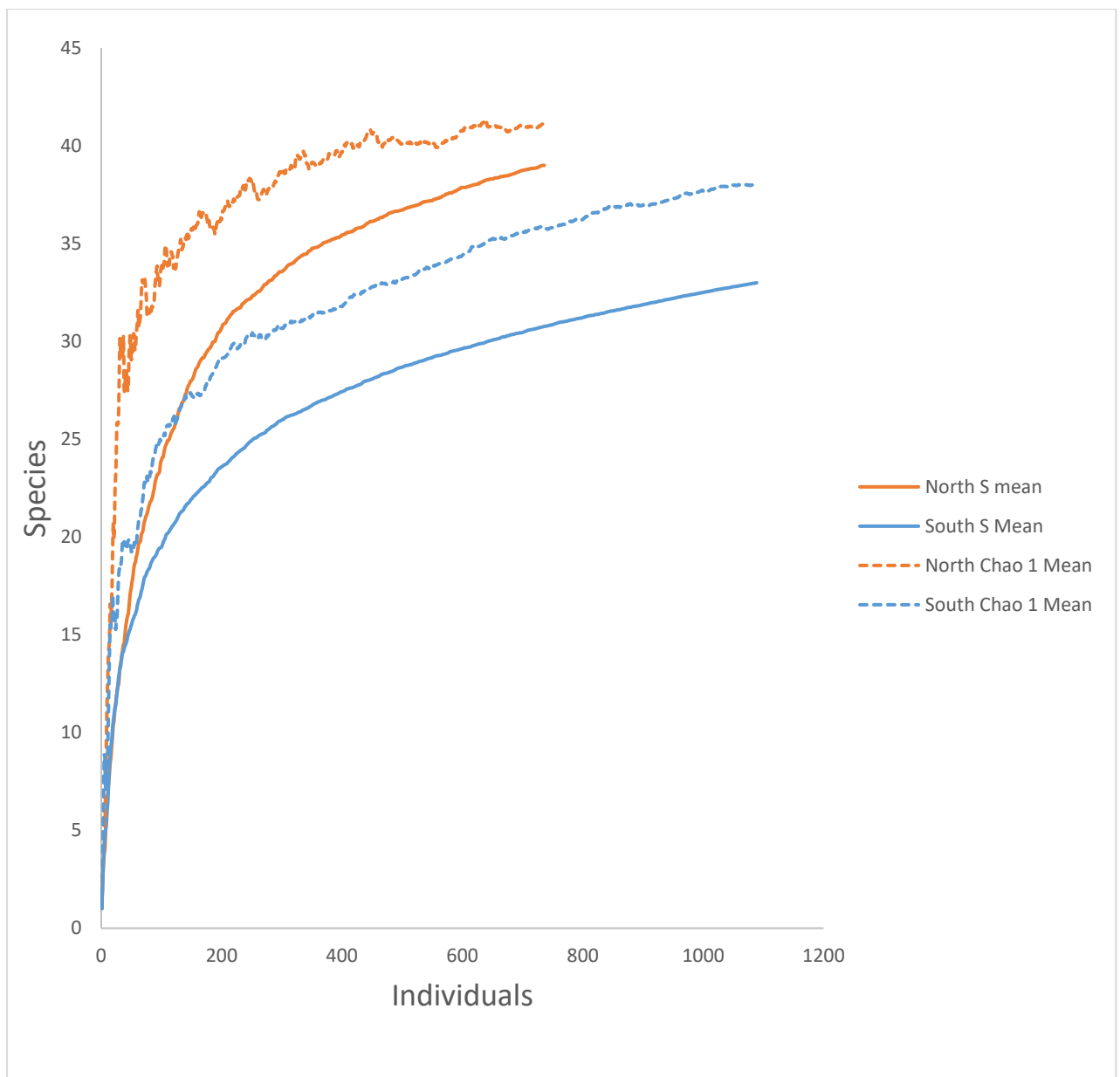


Figure 12. Observed species as defined by 'S Mean' and Chao 1 means for north and south of Caxiuanã River communities. Values: north – S mean = 39, Chao 1 = 41; south - S mean = 33, Chao 1 = 38

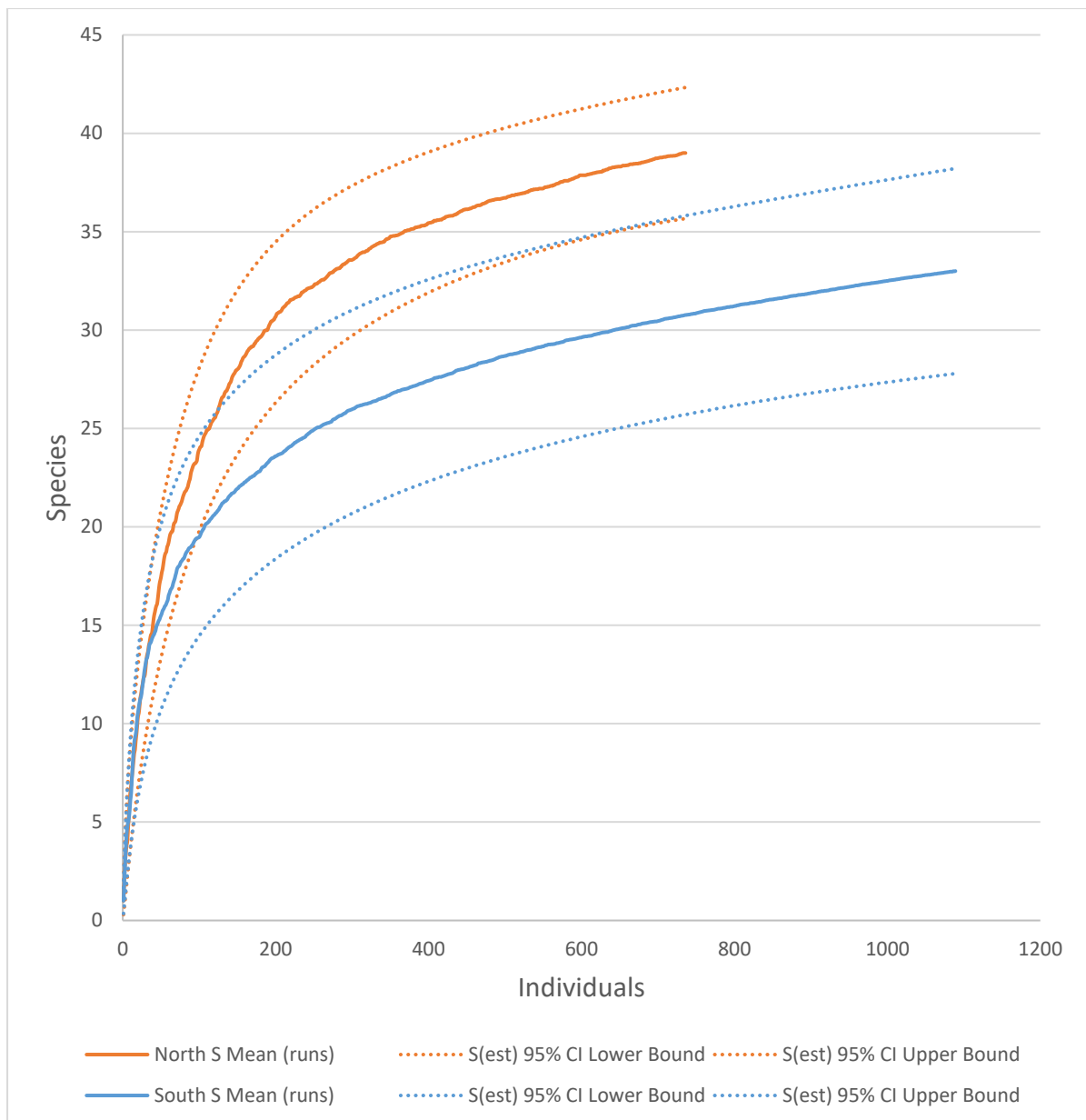


Figure 13. Numbers of species north and south of Caxiuanã River with 95% confidence levels.

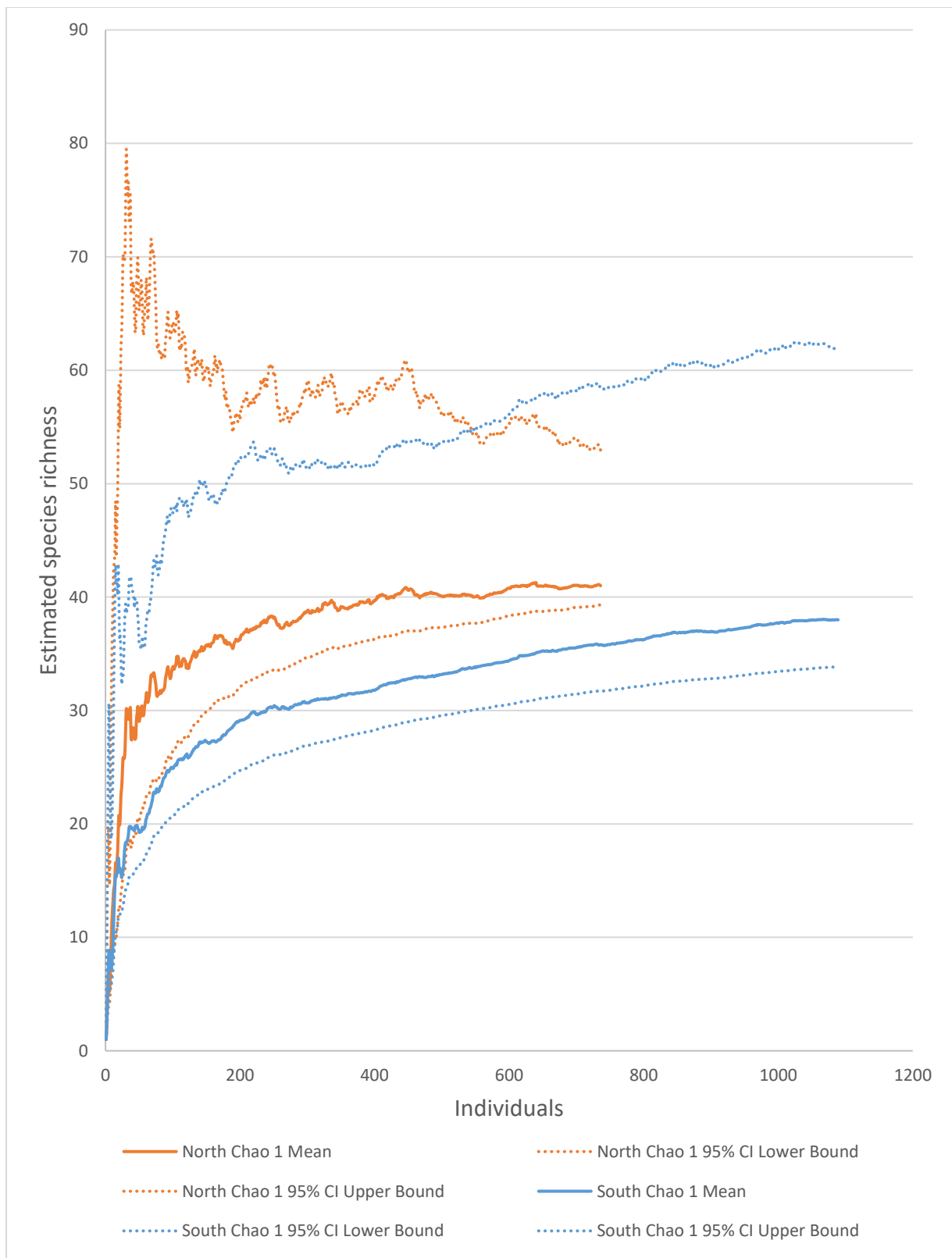


Figure 14. Species richness estimator Chao 1 for the northern and southern communities with 95% confidence levels.

3.5. Caxiuanã assemblages

The total abundance ($n = 1809$) and species richness ($n = 48$) for the four Caxiuanã assemblages are shown in Table 14. The three most abundant species for the assemblages were as follows: Curuá (northern assemblage) – *A. bokermanni* ($n = 137$), *R. magnussoni* ($n = 103$), and *A. galactonus* ($n = 64$). Laranjal (northern assemblage) – *R. magnussoni* ($n = 106$), *Rhinella marina* ($n = 16$), and *Scinax nebulosus* ($n = 11$) and *Hypsiboas cinerascens* ($n = 11$). PPBIO (southern assemblage) – *R. magnussoni* ($n = 335$), *H. boliviana* ($n = 115$), *A. bokermanni* ($n = 97$). IBAMA (southern assemblage) – *Dendropsophus melanargyreus* ($n = 13$), *Ceratophrys cornuta* ($n = 6$), and *Leptodactylus knudseni* ($n = 3$) and *Vitreorana rita* ($n = 3$). The two families occurring only in one assemblage were Centrolenidae that occurred in PPBIO with one species (*V. rita*) and Ranidae that occurred in Laranjal with one species (*Lithobates palmipes*). Genera that only occurred in one assemblage included *Lysapsus* and *Trachycephalus* (Hylidae) in Curuá, and *Adenomera* and *Hydrolaetare* (Leptodactylidae) in Curuá and Laranjal, respectively. There is a clear difference in species richness and abundances between the assemblages, with Curuá and PPBIO consisting of more individuals and species than Laranjal and IBAMA. Simpson's inverse diversity indices were as follows: Curuá - 0.87, Laranjal - 0.71, PPBIO - 0.85, IBAMA - 0.87 (Table 15). These diversity results differed from Fisher's alpha index where IBAMA had the highest mean diversity results at 9.88, followed by Curuá (7.79), Laranjal (7.08) and PPBIO (5.54).

Table 14. The total number of species, individuals and relative abundance percentages for all Caxiuanã assemblages. Genus level data is followed by species level data. RA = Relative Abundance, relative to the total individuals of the assemblage. ORA = Overall Relative Abundance, relative to the overall total of individuals for all assemblages.

Species	Curuá	Curuá RA	Curuá ORA	Laranjal	Laranjal RA	Laranjal ORA	PPBIO	PPBIO RA	PPBIO ORA	IBAM A	IBAMA RA	IBAMA ORA	Overall individual total	Total relative abundance
Aromobatidae	28	5.25%	1.56%	5	2.46%	0.28%	77	7.53%	4.28%	1	2.50%	0.06%	111	6.17%
<i>Allobates</i>	28	5.25%	1.56%	5	2.46%	0.28%	77	7.53%	4.28%	1	2.50%	0.06%	111	6.17%
<i>A. femoralis</i>	15	2.81%	0.83%	4	1.97%	0.22%	33	3.23%	1.83%	0	0.00%	0.00%	52	2.89%
<i>A. sp.</i>	13	2.44%	0.72%	1	0.49%	0.06%	44	4.30%	2.45%	1	2.50%	0.06%	59	3.28%
Bufonidae	246	46.15%	13.67%	124	61.08%	6.89%	433	42.33%	24.07%	9	22.50%	0.50%	812	45.14%
<i>Amazophrynella</i>	137	25.70%	7.62%	106	52.22%	5.89%	97	9.48%	5.39%	0	0.00%	0.00%	340	18.90%
<i>A. bokermanni</i>	137	25.70%	7.62%	106	52.22%	5.89%	97	9.48%	5.39%	0	0.00%	0.00%	340	18.90%
<i>Rhinella</i>	109	20.45%	6.06%	18	8.87%	1.00%	336	32.84%	18.68%	9	22.50%	0.50%	472	26.24%
<i>R. magnussoni</i>	103	19.32%	5.73%	16	7.88%	0.89%	335	32.75%	18.62%	3	7.50%	0.17%	457	25.40%
<i>R. marina</i>	6	1.13%	0.33%	2	0.99%	0.11%	1	0.10%	0.06%	6	15.00%	0.33%	15	0.83%
Centrolenidae	0	0.00%	0.00%	0	0.00%	0.00%	1	0.10%	0.06%	0	0.00%	0.00%	1	0.06%
<i>Vitreorana</i>	0	0.00%	0.00%	0	0.00%	0.00%	1	0.10%	0.06%	0	0.00%	0.00%	1	0.06%
<i>V. ritae</i>	0	0.00%	0.00%	0	0.00%	0.00%	1	0.10%	0.06%	0	0.00%	0.00%	1	0.06%
Ceratophryidae	0	0.00%	0.00%	1	0.49%	0.06%	33	3.23%	1.83%	1	2.50%	0.06%	35	1.95%

Table 14 continued.

Species	Curuá	Curuá	Curuá	Laranjal	Laranjal	Laranjal	PPBIO	PPBIO	PPBIO	IBAM	IBAMA	IBAMA	Overall	Total
		RA	ORA			ORA		RA	ORA	A	RA	ORA	individual	relative
													total	abundance
Craugastoridae	24	4.50%	1.33%	4	1.97%	0.22%	31	3.03%	1.72%	0	0.00%	0.00%	59	3.28%
<i>Pristimantis</i>	24	4.50%	1.33%	4	1.97%	0.22%	31	3.03%	1.72%	0	0.00%	0.00%	59	3.28%
<i>P. fenestratus</i>	24	4.50%	1.33%	4	1.97%	0.22%	31	3.03%	1.72%	0	0.00%	0.00%	59	3.28%
Dendrobatidae	73	13.70%	4.06%	4	1.97%	0.22%	52	5.08%	2.89%	13	32.50%	0.72%	142	7.89%
<i>Adelphobates</i>	64	12.01%	3.56%	4	1.97%	0.22%	38	3.71%	2.11%	13	32.50%	0.72%	119	6.61%
<i>A. galactonotus</i>	64	12.01%	3.56%	4	1.97%	0.22%	38	3.71%	2.11%	13	32.50%	0.72%	119	6.61%
<i>Ranitomeya</i>	9	1.69%	0.50%	0	0.00%	0.00%	14	1.37%	0.78%	0	0.00%	0.00%	23	1.28%
<i>R. amazonica</i>	9	1.69%	0.50%	0	0.00%	0.00%	14	1.37%	0.78%	0	0.00%	0.00%	23	1.28%
Hylidae	90	16.89%	5.00%	41	20.20%	2.28%	48	4.69%	2.67%	6	15.00%	0.33%	185	10.28%
<i>Dendropsophus</i>	8	1.50%	0.44%	12	5.91%	0.67%	16	1.56%	0.89%	0	0.00%	0.00%	36	2.00%
<i>D. leucophyllatus</i>	0	0.00%	0.00%	11	5.42%	0.61%	0	0.00%	0.00%	0	0.00%	0.00%	11	0.61%
<i>D. melanargyreus</i>	3	0.56%	0.17%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	4	0.22%
<i>D. minusculus</i>	2	0.38%	0.11%	0	0.00%	0.00%	16	1.56%	0.89%	0	0.00%	0.00%	18	1.00%
<i>D. minutus</i>	3	0.56%	0.17%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	3	0.17%
<i>Hypsiboas</i>	32	6.00%	1.78%	4	1.97%	0.22%	6	0.59%	0.33%	1	2.50%	0.06%	43	2.39%
<i>H. boans</i>	0	0.00%	0.00%	0	0.00%	0.00%	2	0.20%	0.11%	0	0.00%	0.00%	2	0.11%
<i>H. cinerascens</i>	10	1.88%	0.56%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	10	0.56%

Table 14 continued.

Species	Curuá	Curuá RA	Curuá ORA	Laranjal	Laranjal RA	Laranjal ORA	PPBIO	PPBIO RA	PPBIO ORA	IBAM A	IBAMA RA	IBAMA ORA	Overall individual total	Total relative abundance
<i>H. geographicus</i>	3	0.56%	0.17%	0	0.00%	0.00%	4	0.39%	0.22%	0	0.00%	0.00%	7	0.39%
<i>H. lanciformis</i>	0	0.00%	0.00%	2	0.99%	0.11%	0	0.00%	0.00%	0	0.00%	0.00%	2	0.11%
<i>H. punctatus</i>	0	0.00%	0.00%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>H. raniceps</i>	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	2.50%	0.06%	1	0.06%
<i>H. wavrini</i>	19	3.56%	1.06%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	20	1.11%
<i>Lysapsus</i>	14	2.63%	0.78%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	14	0.78%
<i>L. laevis</i>	14	2.63%	0.78%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	14	0.78%
<i>Osteocephalus</i>	5	0.94%	0.28%	3	1.48%	0.17%	12	1.17%	0.67%	1	2.50%	0.06%	21	1.17%
<i>O. oophagus</i>	2	0.38%	0.11%	0	0.00%	0.00%	6	0.59%	0.33%	0	0.00%	0.00%	8	0.44%
<i>O. taurinus</i>	3	0.56%	0.17%	3	1.48%	0.17%	6	0.59%	0.33%	1	2.50%	0.06%	13	0.72%
<i>Phyllomedusa</i>	8	1.50%	0.44%	0	0.00%	0.00%	1	0.10%	0.06%	1	2.50%	0.06%	10	0.56%
<i>P. hypochondrialis</i>	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	2.50%	0.06%	1	0.06%
<i>P. vaillantii</i>	8	1.50%	0.44%	0	0.00%	0.00%	1	0.10%	0.06%	0	0.00%	0.00%	9	0.50%
<i>Scinax</i>	22	4.13%	1.22%	22	10.84%	1.22%	13	1.27%	0.72%	3	7.50%	0.17%	60	3.34%
<i>S. boesemani</i>	2	0.38%	0.11%	8	3.94%	0.44%	0	0.00%	0.00%	0	0.00%	0.00%	10	0.56%
<i>S. garbei</i>	3	0.56%	0.17%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	4	0.22%
<i>S. nebulosus</i>	6	1.13%	0.33%	2	0.99%	0.11%	13	1.27%	0.72%	2	5.00%	0.11%	23	1.28%

Table 14 continued.

Species	Curuá	Curuá	Curuá	Laranjal	Laranjal	Laranjal	PPBIO	PPBIO	PPBIO	IBAM	IBAMA	IBAMA	Overall	Total
		RA	ORA		RA	ORA		RA	ORA	A	RA	ORA	individual	relative
													total	abundance
<i>S. ruber</i>	11	2.06%	0.61%	11	5.42%	0.61%	0	0.00%	0.00%	1	2.50%	0.06%	23	1.28%
<i>Trachycephalus</i>	1	0.19%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>T. resinifictrix</i>	1	0.19%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
Leptodactylidae	56	10.51%	3.11%	14	6.90%	0.78%	178	17.40%	9.89%	8	20.00%	0.44%	256	14.23%
<i>Adenomera</i>	1	0.19%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>A. hylaedactyla</i>	1	0.19%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>Hydrolaetare</i>	0	0.00%	0.00%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>H. schmidtii</i>	0	0.00%	0.00%	1	0.49%	0.06%	0	0.00%	0.00%	0	0.00%	0.00%	1	0.06%
<i>Leptodactylus</i>	53	9.94%	2.95%	13	6.40%	0.72%	152	14.86%	8.45%	8	20.00%	0.44%	226	12.56%
<i>L. knudseni</i>	3	0.56%	0.17%	0	0.00%	0.00%	2	0.20%	0.11%	1	2.50%	0.06%	6	0.33%
<i>L. mystaceus</i>	6	1.13%	0.33%	0	0.00%	0.00%	64	6.26%	3.56%	2	5.00%	0.11%	72	4.00%
<i>L. paraensis</i>	7	1.31%	0.39%	10	4.93%	0.56%	58	5.67%	3.22%	0	0.00%	0.00%	75	4.17%
<i>L. pentadactylus</i>	8	1.50%	0.44%	2	0.99%	0.11%	13	1.27%	0.72%	2	5.00%	0.11%	25	1.39%
<i>L. petersii</i>	24	4.50%	1.33%	0	0.00%	0.00%	4	0.39%	0.22%	3	7.50%	0.17%	31	1.72%
<i>L. rhodomystax</i>	5	0.94%	0.28%	1	0.49%	0.06%	11	1.08%	0.61%	0	0.00%	0.00%	17	0.94%
<i>Lithodytes</i>	2	0.38%	0.11%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	2	0.11%
<i>L. lineatus</i>	2	0.38%	0.11%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	2	0.11%

Table 14 continued.

Species	Curuá	Curuá	Curuá	Laranjal	Laranjal	Laranjal	PPBIO	PPBIO	PPBIO	IBAM	IBAMA	IBAMA	Overall	Total
		RA	ORA			ORA		RA	ORA	A	RA	ORA	individual	relative
													total	abundance
<i>Physalaemus</i>	0	0.00%	0.00%	0	0.00%	0.00%	26	2.54%	1.45%	0	0.00%	0.00%	26	1.45%
<i>P. ephippifer</i>	0	0.00%	0.00%	0	0.00%	0.00%	26	2.54%	1.45%	0	0.00%	0.00%	26	1.45%
Microhylidae	7	1.31%	0.39%	0	0.00%	0.00%	168	16.42%	9.34%	2	5.00%	0.11%	177	9.84%
<i>Chiasmocleis</i>	0	0.00%	0.00%	0	0.00%	0.00%	8	0.78%	0.44%	1	2.50%	0.06%	9	0.50%
<i>C. avilapiresae</i>	0	0.00%	0.00%	0	0.00%	0.00%	5	0.49%	0.28%	0	0.00%	0.00%	5	0.28%
<i>C. hudsoni</i>	0	0.00%	0.00%	0	0.00%	0.00%	3	0.29%	0.17%	0	0.00%	0.00%	3	0.17%
<i>C. shudikarensis</i>	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	1	2.50%	0.06%	1	0.06%
<i>Ctenophryne</i>	7	1.31%	0.39%	0	0.00%	0.00%	45	4.40%	2.50%	0	0.00%	0.00%	52	2.89%
<i>C. geayi</i>	7	1.31%	0.39%	0	0.00%	0.00%	45	4.40%	2.50%	0	0.00%	0.00%	52	2.89%
<i>Hamptophryne</i>	0	0.00%	0.00%	0	0.00%	0.00%	115	11.24%	6.39%	1	2.50%	0.06%	116	6.45%
<i>H. boliviana</i>	0	0.00%	0.00%	0	0.00%	0.00%	115	11.24%	6.39%	1	2.50%	0.06%	116	6.45%
Pipidae	9	1.69%	0.50%	1	0.49%	0.06%	2	0.20%	0.11%	0	0.00%	0.00%	12	0.67%
<i>Pipa</i>	9	1.69%	0.50%	1	0.49%	0.06%	2	0.20%	0.11%	0	0.00%	0.00%	12	0.67%
<i>P. pipa</i>	9	1.69%	0.50%	1	0.49%	0.06%	2	0.20%	0.11%	0	0.00%	0.00%	12	0.67%
Ranidae	0	0.00%	0.00%	9	4.43%	0.50%	0	0.00%	0.00%	0	0.00%	0.00%	9	0.50%
<i>Lithobates</i>	0	0.00%	0.00%	9	4.43%	0.50%	0	0.00%	0.00%	0	0.00%	0.00%	9	0.50%
<i>L. palmipes</i>	0	0.00%	0.00%	9	4.43%	0.50%	0	0.00%	0.00%	0	0.00%	0.00%	9	0.50%

Table 14 continued.

Species	Curuá	Curuá RA	Curuá ORA	Laranjal	Laranjal RA	Laranjal ORA	PPBIO	PPBIO RA	PPBIO ORA	IBAM A	IBAMA RA	IBAMA ORA	Overall individual total	Total relative abundance
Total Individuals	533			203			1023			40			1799	

Table 15. Assemblage diversity indices.

	Curuá	Lower	Upper	Laranjal	Lower	Upper	PPBIO	Lower	Upper	IBAMA	Lower	Upper
Simpson_1-D	0.871	0.853	0.886	0.707	0.64	0.77	0.856	0.84	0.871	0.847	0.751	0.899
Fisher_alpha	7.785	7.785	7.785	7.079	7.079	7.079	5.541	5.541	5.541	9.884	5.812	9.884
Chao-1	33.75	33	40.5	31.2	24.6	42.33	29.75	29	39	25	14.2	38.5

Figure 15 demonstrates that with 33 species, Curuá has the highest species richness among the four assemblages. PPBIO has the highest abundance of individuals and the steepest decline in species evenness. Laranjal and IBAMA are the least abundant and rich assemblages. Large differences can be seen across the assemblages. Laranjal and IBAMA are underrepresented compared to Curuá and PPBIO, precluding meaningful comparisons between assemblages with few individuals and those with many individuals. The species with the most notable differences were *R. magnussoni* when comparing Curuá ($n = 5.73\%$) with PPBIO ($n = 18.62\%$), and *H. boliviana*, again comparing Curuá ($n = 0.00\%$) with PPBIO ($n = 6.39\%$). There were 19 species that only occurred in one of the assemblages (Table 16) and seven species that occurred across all assemblages (Table 17).

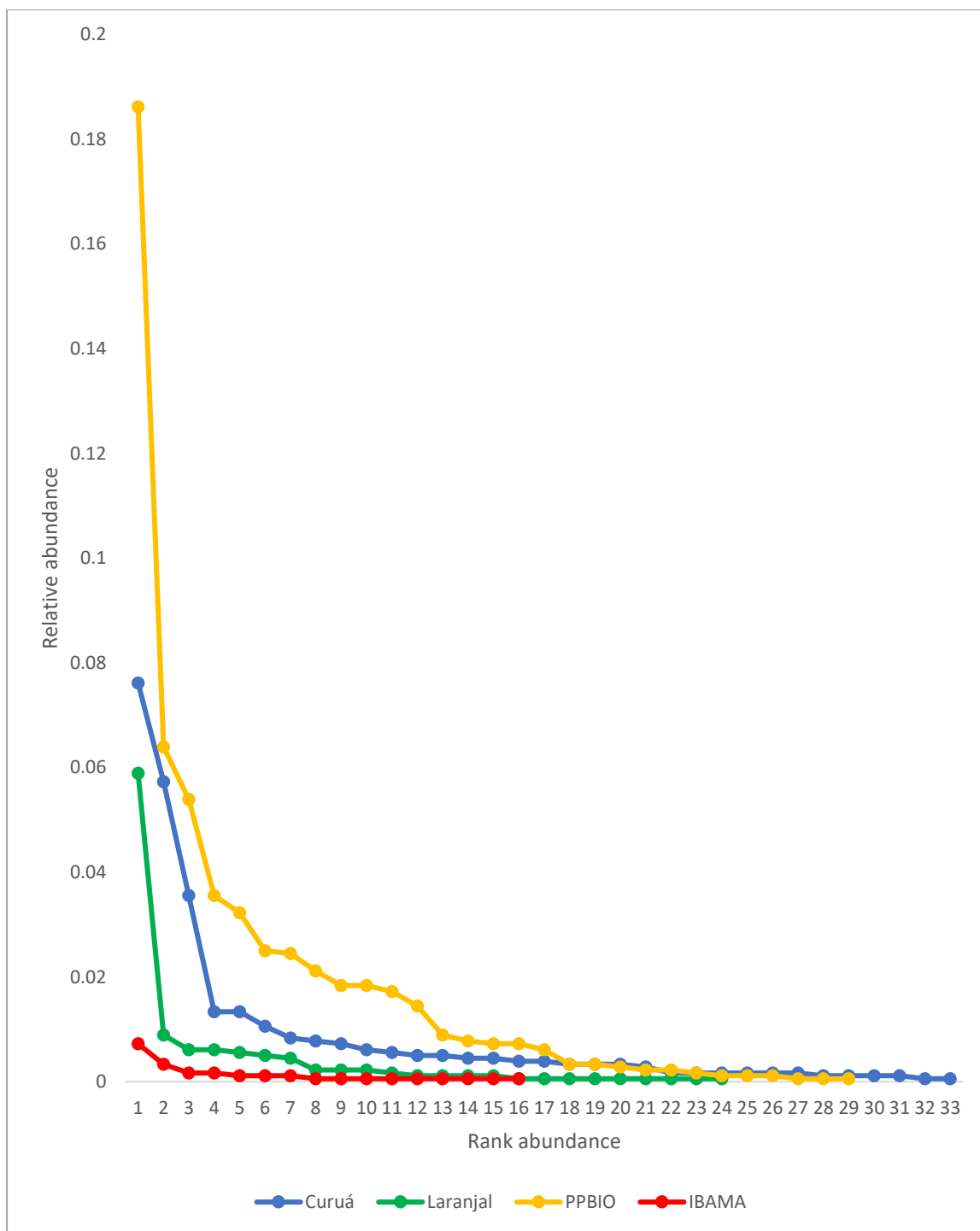


Figure 15. Rank abundance for assemblage in Caxiuanã.

Table 16. Species that were recorded in only one assemblage.

Family	Genus	Species	Curuá	Laranjal	PPBIO	IBAMA
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	0	0	1	0
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	0	11	0	0
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	0	0	2	0
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	3	0	4	0
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	0	2	0	0
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	0	1	0	0
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	0	0	0	1
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	14	0	0	0
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	0	0	0	1
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0	0	0
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0	0	0
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	0	1	0	0
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	0	0	0
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	0	0	26	0
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	0	0	5	0
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	0	0	3	0
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	0	0	0	1
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	0	9	0	0

Table 17. Species that occurred in all assemblages.

Family	Genus	Species	Curuá	Laranjal	PPBIO	IBAMA
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	13	1	44	1
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	103	16	335	3
Bufonidae	<i>Rhinella</i>	<i>marina</i>	6	2	1	6
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	64	4	38	13
Hylidae	<i>Osteocephalus</i>	<i>taurus</i>	3	3	6	1
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	6	2	13	2
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	8	2	13	2

Figure 16 shows that Curuá has the highest species richness among the assemblages even when Curuá and PPBIO are rarefied to the same number of individuals as Laranjal. When rarefied to this level, Laranjal has a higher observed species number and species richness than PPBIO. However, such comparisons should be made carefully as Laranjal is relatively understudied compared to that of Curuá and PPBIO. No meaningful comparisons can be made with IBAMA. When comparing the 95% confidence limits for the observed species for all assemblages (Figure 17), the confidence limits of Curuá and PPBIO do not overlap, showing that Curuá likely has a higher species richness than PPBIO. When Curuá and PPBIO are rarefied to the same number of individuals as Laranjal, the lower confidence limit of Laranjal is almost the same as the lower confidence limit of PPBIO, while the upper confidence limit of Laranjal is higher than the mean for Curuá. No asymptote has been reached for any of the assemblages in regard to observed species. The upper 95% Chao 1 confidence limit of PPBIO is higher than that of Curuá, which when rarefied to the level of Curuá has a steeper decline than that of PPBIO (figure 18). The Chao 1 means for both Curuá and PPBIO are close to that of the lower confidence levels. The data from Laranjal and IBAMA are insufficient to make reasonable species richness comparisons with the other assemblages. None of the assemblages exhibits an asymptote for species richness; PPBIO even shows a steady decline towards the end. Analysis of Simpson's inverse diversity indices shows that Curuá has the greatest diversity among the assemblages (Figure 19), Laranjal shows low diversity compared to Curuá or PPBIO despite higher observed species mean and species richness when PPBIO is rarefied to its level.

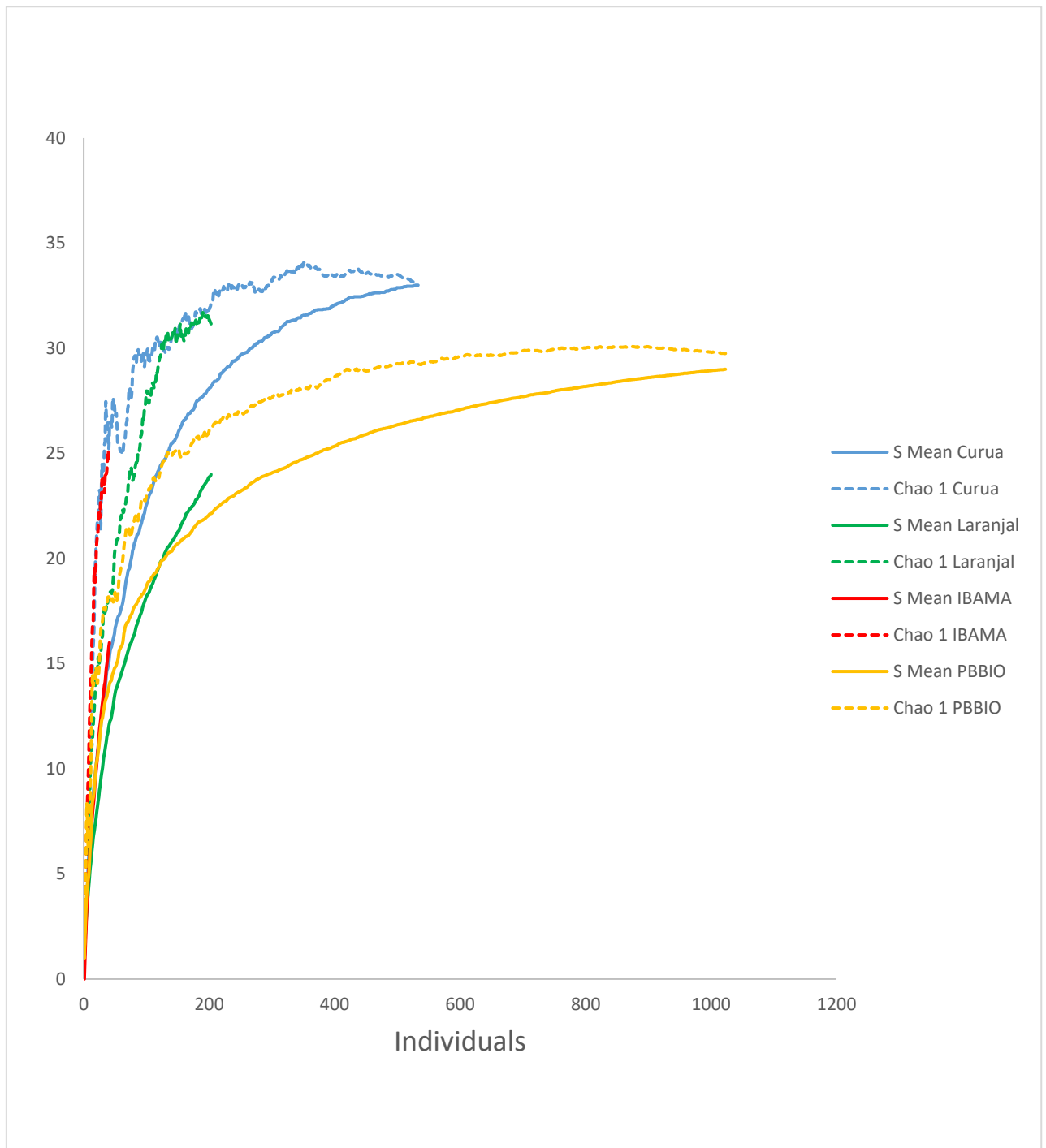


Figure 16. Observed species as represented by 'S Mean "relevant assemblage and species richness as represented by 'Chao 1' relevant assemblage for assemblages. Curuá – S mean: 33 Chao1: 33.2; Laranjal – S mean: 24 Chao1: 31.6; IBAMA – S mean: 16 Chao1: 24.78; PBBIO – S mean: 29 Chao1: 29.75.

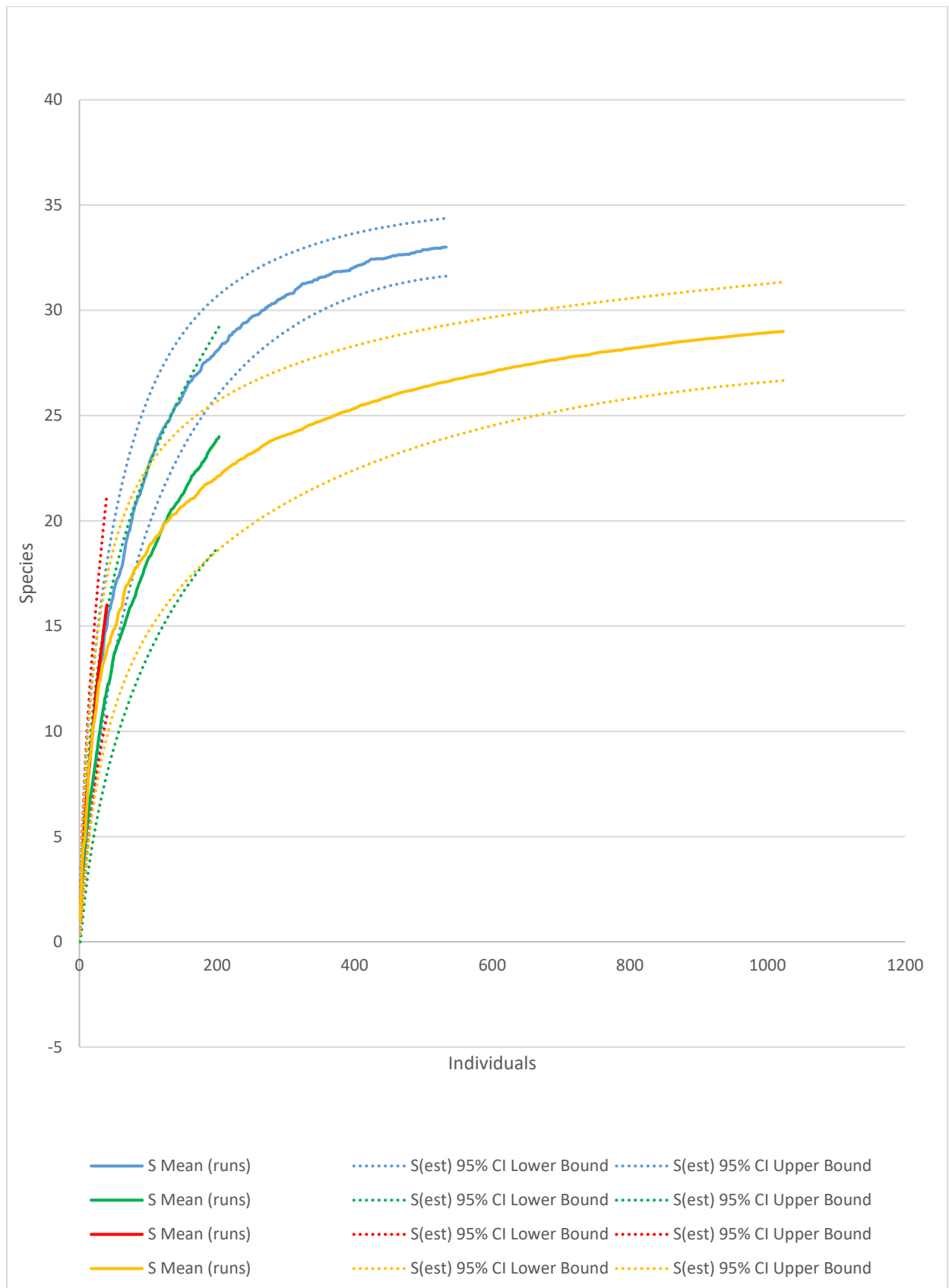


Figure 17. The means of individuals collected with 95% confidence limits for the assemblages sampled in Caxiuanã. Blue = Curuá, green = Laranjal, red = IBAMA, yellow = PPBIO.

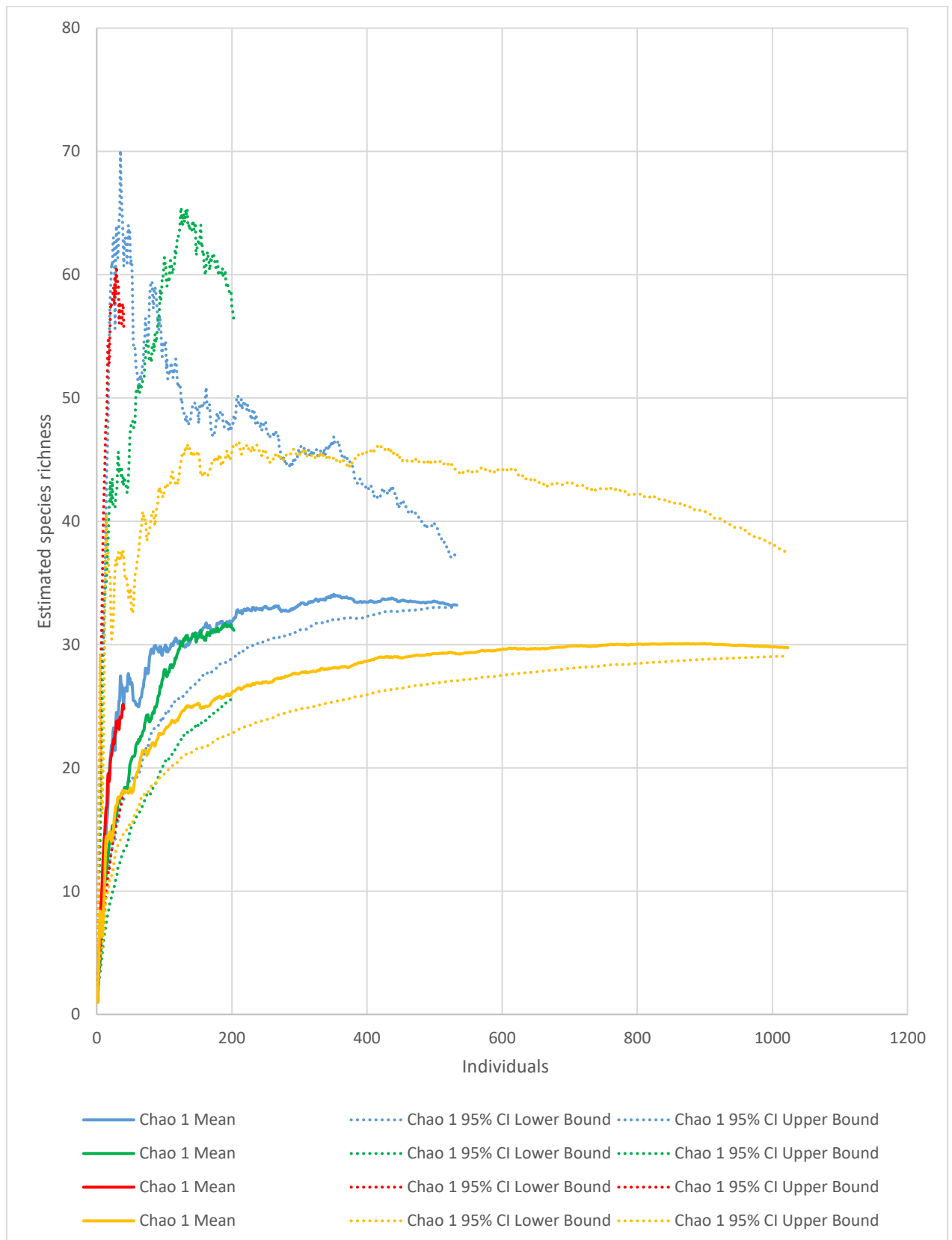


Figure 18. Species richness among Caxiuanã assemblages as depicted by Chao 1 means including 95% confidence limits. Blue = Curuá, green = Laranjal, red = IBAMA, yellow = PPBIO.

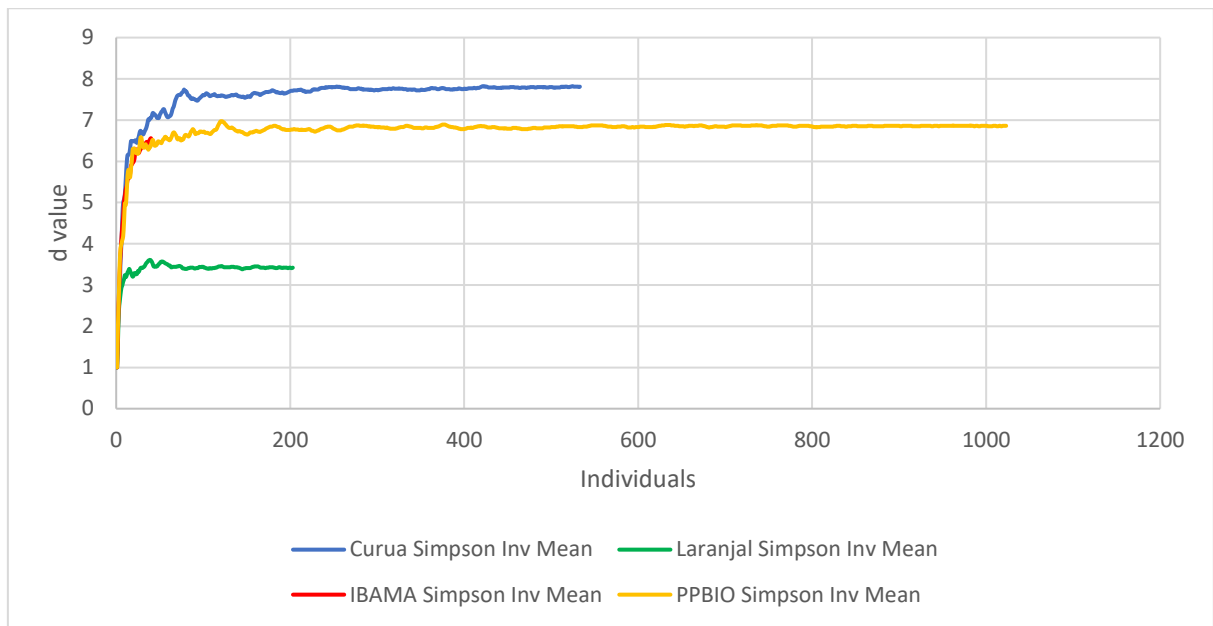


Figure 19. Simpson's inverse indices for assemblages. d value refers to Simpson's inverse diversity index value.

4.0. Discussion

A recurring topic throughout this research was the inconsistent sampling information in the data set. The issues included temporally and spatially uneven sampling intensity, lack of data for many of the individuals for the categories studied (location, habitat and microhabitat collected, GPS coordinates), and data collection by several different individuals. Ideally, the data would be systematic and standardised, with sampling at specific location occurring at regular intervals during multiple seasons, via multiple diurnal and nocturnal sampling techniques, with comments on location, habitat, and microhabitat. However, obtaining such data would require planning and personnel which was not available for the current research. Despite these drawbacks, the current data are believed to be novel and significant to the understanding of distributional patterns of Amazonian anurans.

4.1. Diversity and richness statistical analyses

Overall Caxiuanã had a high diversity of anurans. When compared with Fisher's alpha index, the Simpson's inverse index resulted in different rank orders for the communities and assemblages. Simpson's inverse index resulted in the southern community having higher diversity (0.87) than the northern community (0.85), while Fisher's alpha and Chao 1 index resulted in higher results for the northern community (Table 13). When comparing the community diversity index results against the assemblage results, it can be seen that all indices are higher for Curuá than PPBIO (Table 15). Therefore, a methodological artefact caused by the low sample sizes of Laranjal and IBAMA could explain the discrepancy in the community results.

The Chao 1 results demonstrates that the northern community has higher species richness compared to the southern community; in figure 13, the lower confidence level of the northern community only slightly overlaps the upper confidence level of the southern community. When analysing the observed species in figure 17, there is no overlap in confidence levels for Curuá and PPBIO. This suggests that the northern community, mostly due to the sampling in Curuá, had the highest observed species richness. The rarefaction curves for the Chao 1 means and confidence levels are more varied for the communities and assemblages (figure 14 & 18). The assemblage Chao 1 results demonstrate that the sampling

in Curuá and PPBIO had higher validity than measuring the communities because of the lower range in confidence levels seen (figure 14 & 18). The upper confidence level for PPBIO is higher than that of Curuá, with Curuá demonstrating a steeper decline than PPBIO. This could mean that with more sampling within PPBIO, the areas species richness could increase to more than is currently seen in Curuá. Furthermore, the Chao 1 means for Curuá and PPBIO are both close to the lower confidence level suggesting, that the currently observed species richness is similar to the lowest possible species richness encounterable. From these results, Curuá and the northern community have the highest diversity and species richness from the sampled areas within Caxiuanã but more sampling across all areas is needed to give accurate results.

Chao et al. (2005) state that sampling limitations create challenges for making accurate estimations of species richness and diversity within assemblages, particularly from those with high species richness and many rare species, such as is seen in Caxiuanã. Individual abundance per assemblage is an unbiased measurement of sampling effort, with the higher cumulative number of individuals equal to higher sampling effort (Moreno & Halffter, 2001). Based on this, the southern community had higher sampling effort than the northern community. These results are mirrored in the assemblage analysis. PPBIO had the highest abundance (and thus, the highest sampling effort of the assemblages), while Curuá had the highest species richness. Typically, increased sampling effort increases species richness of an area (Walther & Martin, 2001; Bady et al., 2005), highlighting that, despite the high abundance of individuals recorded in PPBIO, Curuá has a higher species richness. However, species richness can not only be defined by a single richness estimator (Walther & Martin, 2001). When comparing the approximate areas (based from the individuals GPS data) of the assemblages sampled (Appendix 10), the area of Curuá (100 km²) was around triple the size of Laranjal (26.7 km²) and PPBIO (25 km²), while with 1.6 km² IBAMA by far had the least area sampled. The fact that Curuá harboured the highest species richness from the four assemblages is therefore plausible. However, the whole range of the Curuá assemblage was unequally sampled, with the majority of individuals occurring at Igarapé Curuá. Furthermore, when considering the years which the individuals were collected, sampling in PPBIO was almost entirely conducting during 2007 ($n = 1028$) with three additional individuals collected during 2009, compared with Curuá where sampling was more widespread with most sampling occurring in 1997 ($n = 162$), 1993 ($n = 148$), and 1996 ($n = 92$, Appendix 11).

Because distribution and species density change both temporally and spatially, making such comparisons between Curuá and PPBIO needs to be regarded with caution. Taking into consideration these differences in sampling effort between assemblages, the high species richness for Curuá and the northern community of Caxiuanã is generally appropriate. Furthermore, future research on Caxiuanã anurans will result in data to investigate any changes in community composition since the 1990s, and the potential discovery of new species in the area. The data from PPBIO provides a good baseline for comparing anuran abundance and species richness in the area. However, more frequent sampling with a variety of visual, acoustic and trap methodologies is advised to propose more confident estimations of anuran species richness and abundance in Caxiuanã.

4.2. Riverine barrier hypothesis

Fifteen species were only collected north of the Caxiuanã river, and nine species were only collected south of the river (Table 12). Of these species, 23 had fewer than 30 individuals recorded and 17 of the species had fewer than 10 individuals recorded. *Hamptophryne boliviana* had the greatest difference in abundance among the northern and southern communities with 116 individuals only recorded in the southern community (115 in PPBIO and one individual in IBAMA). *Hamptophryne boliviana* is a small-bodied, nocturnal and fossorial species known to be widespread across Amazonian but uncommon throughout its distribution (Schlüter & Salas, 1991; Moraes et al., 2016). There are no obvious functional or life-history traits of this species that could explain the high abundance in the southern community of Caxiuanã compared to the northern community. Since pitfall traps were a primary method used in PPBIO (U. Galatti, personal communication 2017), the fossorial nature of the species, might have resulted in higher recordings in this area. Of the seven species with the highest abundance recorded in only one community (*H. boliviana*, *Physalaemus ephippifer*, *Hypsiboas wavrini*, *L. laevis*, *Dendropsophus leucophyllatus*, *H. cinerascens*, *Scinax boesemani*), five were only recorded in Curuá despite the overall lower abundance of individuals recorded in Caxiuanã (*H. wavrini*, *L. laevis*, *D. leucophyllatus*, *H. cinerascens*, *S. boesemani*). This could potentially be due to the higher species richness in Curuá. However, it is more plausible that inadequate sampling is the reason behind the lack

of sighting of these species and the other species only collected in one community or one assemblage. Inconsistent and insufficient sampling among the areas of Caxiuanã was a main limitation of this research, most notably in the IBAMA and Laranjal assemblages. Conclusions on the barrier effect of rivers based from insufficient sampling is a common error in this area of research (Santorelli, Magnusson & Deus, 2018).

Riverine barrier studies typically focus on populations of either bank of a river to test the phylogenetic similarity and species composition. Since phylogenetic analysis was beyond the scope of this research and anuran distributional data were lacking on the direct southern bank of the Caxiuanã river, the main comparisons were based on presence and absence data between the northern and southern communities. The distance between Curuá and PPBIO is around 30 m, a small distance compared to the width of some larger rivers. However, distinct genetic differentiation has been found between two populations of *A. andrea*, a species found in Caxiuanã but removed due to taxonomical complications, at only 100 m apart (Fouquet et al., 2012), suggesting that differentiation between populations can occur at a relatively small geographical range. It is unlikely that a riverine barrier effect restricts the gene flow or the distribution of Caxiuanã anurans because of the small size of the Caxiuanã River. Phylogeographic research may be more promising when comparing population on either side of Caxiuanã bay as it is noticeably larger than the Caxiuanã River (Figure 3) and could have more potential of acting as a riverine barrier. Future research could involve population genetic analysis of anurans in the PPBIO plot and compare that with identical sampling techniques conducted on the opposite bank of Caxiuanã bay, applying the criteria for riverine barriers as summarised in Santorelli, Magnusson & Deus (2018)

Research has supported the hypothesis that anuran life-history and functional traits, particularly those relating to environmental preference and reproduction, influence the magnitude of a barrier effect upon species (Fouquet et al., 2012, 2015; Moraes et al., 2016). This suggests that functional ecology may be a more promising area of research than phylogenetics when studying the differentiation of populations on a small geographical scale, as it may lead to promising insights into the understanding of the species interaction with the environment, and thus into factors influencing the distribution and the composition of anuran communities. For example, arboreal species (such as Hylidae) have been predicted to have greater dispersal ability due to their higher tolerance to temperature variation and desiccation compared to leaf litter species that depend on more consistent environmental

variables (Fouquet et al., 2015; Moraes et al., 2016). As another example, species with large tadpoles in lotic waterbodies (e.g. *Hypsiboas boans*) have greater dispersal ability, compared to species with direct developing (e.g. *Pristimantis*) or endotropic larvae (e.g. *Adenomera*), which have been shown to display high levels of differentiation (Fouquet et al., 2015). In addition, it was also found that large-bodied and nocturnal species, as well as riparian species associated with large rivers, have higher resilience to a riverine barrier effect (Moraes et al., 2016).

Smaller rivers such as the Caxiuanã River are not expected to have the same effect on species distributions as larger rivers. Moraes et al. (2016) investigated the riverine barrier effect of the Tapajos River on anuran and squamate assemblages, including anuran species which were also sampled in the present research. Four species (*A. galactonotus*, *R. amazonica*, *L. knudseni*, *L. paraensis*) were affected by the riverine barrier. However, in the present research all four of these species occurred on both sides of the Caxiuanã River. For *A. galactonotus*, *R. amazonica*, and *L. paraensis*, the currently known distribution is limited to the eastern side of the Tapajos River. This could be explained by the timing of the formation of the different Amazonian tributaries. The Tapajos River drainage system developed up to 1.0 Mya before the Tocantins River (Ribas et al., 2012), which is the mouth of the water system leading to Caxiuanã, potentially suggesting that the formation of the Tapajos River system played a larger role in the distribution of species than the formation of the Caxiuanã water system. However, *Ranitomeya amazonica* is also restricted to the eastern bank of the Tapajos River (Moraes et al., 2016), although it has been found as far west as Peru (Brown et al., 2011), as well as in French Guiana where no barrier effect was found for the Oyapock River (Fouquet et al., 2015). The distribution of this species is understudied, and the restricted distribution may be due to a factor other than riverine barriers. Furthermore, there were several species (*H.s boans*, *H. cinerascens*, *Phyllomedusa hypochondrialis*, *Lithodytes lineatus*, *Ctenophryne geayi*, *H. boliviana*) only collected on one side of the Caxiuanã River that were not restricted by the Tapajos River in Moraes et al. (2016). This suggests that insufficient sampling might have caused the apparent restricted distribution of these species in the present research.

Research supporting the riverine barrier hypothesis is often mixed with studies displaying unsupportive evidence. The Jurua River has been shown to display a barrier effect on anuran species (Funk et al., 2007), and has been shown to express within-population genetic

diversification for anuran species (Gascon, Loughheed & Bogart, 1998). However, Gascon (2000) proposed that the Jurua River does not act as a distributional barrier for anurans or small mammal species. Factors such as age of the river or the degree of meandering may influence the barrier effect (Gascon, Loughheed & Bogart, 1998). The Madeira River has commonly been considered to exert a barrier effect on anurans (Simões et al., 2008; Dias-Terceiro et al., 2015). However, recent findings revealed that out of 1952 species across 14 taxonomic groups only two species from two groups had distributions determined by the river (Santorelli, Magnusson & Deus, 2018). A standardised methodology should be implemented when testing the barrier hypothesis across Amazonian rivers.

It is important to consider alternative hypotheses for the explanation of community structure. One study found that ancient ridges that formed the current topography of the area rather than the Jurua River was the key element in the phylogenetic diversification of an anuran species (*Allobates femoralis*, Loughheed et al., 1999). Historical elements have been shown to affect the distribution of anuran species on a regional scale, while environmental factors affect distribution on a local scale (Dias-Terceiro et al., 2015). This demonstrates that the causality behind observed species diversification can be more cryptic than it first appears. Overall, no barrier effect was found to be exerted by the Caxiuanã River on the distribution of anurans in the area. Due to the size of the Caxiuanã River it is unlikely that any future research will result in a significant barrier effect on species.

4.3. Life-history and functional traits

Life-history traits and categories were found to have a significant effect on the species sampled in this research, demonstrating their importance on the distribution of species. Within the present research, 52.08% of the species are listed as riparian, 89.58% of species are dependent on water for reproduction, and 64.58% use lentic water bodies for reproduction. Since Caxiuanã is a riparian forest, it is expected to see many species dependent on aquatic sites. Species occurring in a given community will be associated to specific assembly rules, meaning that environmental variables can act as a filter that removes unsuitable traits and thus unsuitable species (Keddy, 1992). Accurate information on the presence, absence and abundance of anuran species is essential for compiling

assembly rules for an environment (Keddy, 1992). There are five main categories of traits: developmental, morphological, physiological, life history and behavioural (Werner & Peacor, 2003); a combination of these traits governs the ability of a species to occur within a given habitat. Location, habitat preference, microhabitat preference, aquatic reproductive type, and activity period were found to have a significant effect on the distribution of the species sampled. A limitation of this research is that Chi-square is unable to show which specific category is significant for which species. It is likely that categories with many variables, such as 'aquatic reproductive type' or 'location', will have varying levels of importance in determining a species distribution. Defining the assembly rules for anurans in Caxiuanã would be a promising area for future research as traits have generally been shown to influence the distribution of Amazonian anurans (Magnusson & Hero, 1991; Amezcuita et al., 2009; Poelman, Wijngaarden & Raaijmakers, 2013; Bessa-Silva et al., 2016; Maia, Lima & Kaefer, 2017). However, measuring all traits, variables and the interactions with the environment is too great a task, and specific factors need to be prioritised (McGill et al., 2006).

Among the species sampled, those with an aquatic larval stage are the most dominant (Table 6). Traits related to aquatic larvae are dependent on multiple factors such as suitable reproductive sites (Menin et al., 2007) and biotic influences such as predators (Magnusson & Hero, 1990). However, the presence of fish in anuran reproductive sites results in the decrease in eggs consumption by other predators, demonstrating the complex nature of ecological interactions (Magnusson & Hero, 1990). Therefore, terrestrially reproducing anurans (*P. fenestratus*, *Leptodactylus pentadactylus*, *Adenomera hylaedactyla*, *C. hudsoni*) that can complete their life cycle without water (Haddad & Prado, 2005) will be subject to different assembly rules (Becker et al., 2009, 2010). Some example of traits that effect the distribution of species sampled include the skin toxins unpalatable to fish, which allow *H. geographicus* to occur in waterbodies which other species are unable to inhabit (Caldwell, 1989). Eggs of *Osteocephalus oophagus* are deposited in bodies of water in plants, mainly epiphytes and bromeliads to which the female returns to deposit unfertilised eggs for the larvae (Lima et al., 2005). However, species with a high abundance in a given environment (such as *R. magnussoni* in this study) can have a greater impact on ecosystem functioning than less abundant species (Diaz & Cabido, 2001). This demonstrates the wide range of traits relating to anuran distribution throughout Caxiuanã, which can be expanded to the range of

traits throughout the Amazon rainforest. Many species in this study still require in-depth analysis of life-history, behaviour, morphology, and physiology.

Functional diversity should be considered for research focusing on the spatial distribution of anurans, to provide an alternative way of assessing community structure rather than measurements of species richness and diversity. Functional diversity is also important to implement with conservation plans. If an effective anuran conservation plan was to be initiated in Caxiuanã, it should focus on the protection of species with aquatic larvae, taking into consideration this common life-history trait in the area (Becker et al., 2010). Additional research could prioritise investigating which traits effect the distribution of endangered or high-risk species. Forty-five of the recorded species are currently listed as 'least concern' by the IUCN, two are listed as 'data deficient' and *A. sp.* is not listed. Although no high-risk species were sampled in the present research, applying functional ecology to other areas with high-risk species would be an efficient way to prioritise conservation strategies. An in-depth understanding of the range of traits for species across different taxa throughout Amazonia would likely aid in the formation of assembly rules which could lead to greater confidence when implementing conservation plans for specific areas, or species.

4.4. Anuran abundance comparison of sites

Some striking differences in abundance can be seen when comparing the results of the present research to that of others conducting in Amazonian. Menin, Waldez & Lima (2008) conducted a study in Reserva Ducke, Manaus, and found 7162 individuals of *P. fenestratus*, and 3222 individuals of *O. oophagus*, while only 69 and 8 individuals were recorded in Caxiuanã for this research, respectively. Both species are small and nocturnal, and *O. oophagus* is arboreal (Table 6), which cause these species to be cryptic and potentially difficult to sample. The majority of individuals from these species were recorded in Reserva Ducke were via acoustic surveys. In Caxiuanã there were few acoustic surveys conducted, which likely plays a large role in the drastic differences in abundances seen between these studies. As another example, seven individuals of *Leptodactylus mystaceus* were recorded in Reserva Ducke, by visual encounters (Menin, Waldez & Lima, 2008), whereas 72 individuals were recorded in Caxiuanã, the majority of which in PPBIO during 2007 via transect surveys,

suggesting differences in abundance for this species between the two sites. Future research focusing on the recording of anuran abundances in Caxiuanã and elsewhere should have a range of collection techniques, including standardised visual and audio surveys combined with different traps taking into consideration the range of life-history traits among Amazonian anurans, to gain more realistic estimations of the anuran abundance for the area.

While recent research on anuran abundance and distribution revealed diverse findings across Amazonia, similar variation has also been recorded in Caxiuanã alone. For the Curuá assemblage, Avila-Pires & Hoogmoed (1997) conducted three expeditions during dry and rainy seasons in 1992 and 1993, focusing mainly near the ECFPn centre. One-hundred-eighty-four *A. bokermanni* individuals were recorded in these two years, however only 64 individuals (from a total of 343) to the dataset used in the present research were collected by Avila-Pires and Hoogmoed (Appendix 12). Additionally, 44 *Lysapsus laevis* individuals were collected but the present research only has 14 recorded individuals collected by other researchers (Appendix 13). Furthermore, Bernardi (1999) focused on sampling anurans from the Igarapé Araua and Igarapé Laranjal (figure 4), in the northern community of Caxiuanã and Igarapé Araua (listed under the Curuá assemblage in the present research, with J. A. R. Bernardi being among the listed collectors for this research). In total, Bernardi (1999) encompassed 48 days of sampling before 1999, significantly less than that of the collective sampling time for this research. Thus, abundances will not be commented on unless deemed significant. Five species were not included within the dataset of this research but were documented in Bernardi (1999), including *A. andreae*, *Adenomera* sp and *Osteocephalus* sp. which were included in the original raw dataset but removed from further analysis. *Bufo typhonius* is now listed under the *Rhinella margaritifera* group, and no information could be obtained on the species *Colosthetus marchesianus*. There were 237 *A. bokermanni* samples recorded within such a limited sampling time compared to 343 individuals in the dataset used for this research. There was a total of ten *Trachycephalus resinifictrix* individuals recorded while only one specimen in this dataset. In addition, there were 55 *Scinax garbei* individuals recorded compared to four within the present dataset. For the species mentioned, these are clear underestimations of the real abundance of these species in the dataset for the present research, in particular *A. bokermanni* which had high abundances in other research (Avila-Pires & Hoogmoed, 1997; Bernardi, 1999).

Avila-Pires et al. (2012) reviewed differences in the distribution of species occurring in Caxiuanã. *Dendrobates minutus* and *Arthrosaura kockii* (a lizard species) were found to be common within the ECFPn site, the range of which is defined similar to that of the Curuá assemblages in the present work (see figure 4 for the ECFPn boundary) but were absent in other areas of Caxiuanã. *Dendrobates minutus* was also only found in the Curuá assemblage. However, Avila-Pires et al. (2012) note that these two species are likely present in other areas of Caxiuanã but are hard to detect due to their rarity. Nevertheless, these are good examples to highlight the noticeable differences in abundance of certain species within fine-scale ranges such as in Caxiuanã and that it is possible some of the species with fewer recorded individuals may be found in other areas with further sampling. Perhaps the most striking example of small-scale distributional variation of a Caxiuanã species is that of *A. galactonotus*. Hoogmoed & Avila-Pires (2012) investigated the distributional range and difference in colour morphs of *A. galactonotus* throughout Para, Brazil, and found that the colour of this species ranges from yellow, orange, red, white, and light blue, depending on the specific population. Caxiuanã consists of individuals with an orange dorsum with varying percentage of black spots, a colour morph which is located in the Curuá region (specifically along the Igarapé Curuá), near the IBAMA base, and along the Igarapé Laranjal. Yellow morphs are located at the PPBIO site (see Figure 3) and blue colour-morphs are located east of the PPBIO plot (see Figure 7). It is currently unknown what could cause such a variation in colour among this species and why the different colour morphs have not been recorded overlapping (Hoogmoed & Avila-Pires, 2012). The distributions of *D. minutus* and *A. galactonotus* in Caxiuanã are demonstrations of unusual small-scale differences in assemblage composition without environmental determinants.

4.5. Conclusion

This study revealed that life-history and functional traits are more likely to play an important role in small-scale diversification than the Caxiuanã River does as a barrier. This research also establishes the role that functional ecology plays on community structure and species distribution, as well as the importance of incorporating life history in research investigating fine-scale ecology. Furthermore, the present research demonstrates the practicality of long-term museum records. Despite methodological issues in the present data meaningful results

were produced by incorporating multiple statistical analyses. This research could be used as an example for future studies on community composition using available collection data from research facilities, saving resources such as time, money and personnel needed for long-term distributional studies. However, any future research adapting this methodology will need to clearly understand the specific limitations of the data obtained. Researchers should aim towards a global standardisation of sampling methodology to make results comparable and to perform similar ecological studies more robustly. Within Caxiuanã, future research should contain less sporadic anuran abundance data, collected via standardised techniques across evenly distributed sites to confidently comment on community composition. A technique that was unavailable in this research but would be ideal for future studies, and that has been found to be effective in anuran sampling when considering life-history traits is using eDNA to sample individuals within an area (Lopes et al., 2017). Incorporating modern methods such as these into studies will help improve data collection and analysis.

Overall, the statistical analyses and results demonstrate quantitatively that assemblage diversification can occur within populations on a relatively small geographical scale, and that life-history may be a main influence. It is also believed that Caxiuanã represents a suitable study system to promote the investigation of small-scale community structure, and that this area should not be overlooked in trying to understand Amazonian ecology on a larger scale. Future research should focus on the understanding of functional traits, not only for anurans but other taxa occurring in Caxiuanã to aid in formulation of ecological rules for the occurrence of species in a given habitat and in implementing effective conservation plans for endangered and threatened species.

5.0. References

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6.0.Appendices

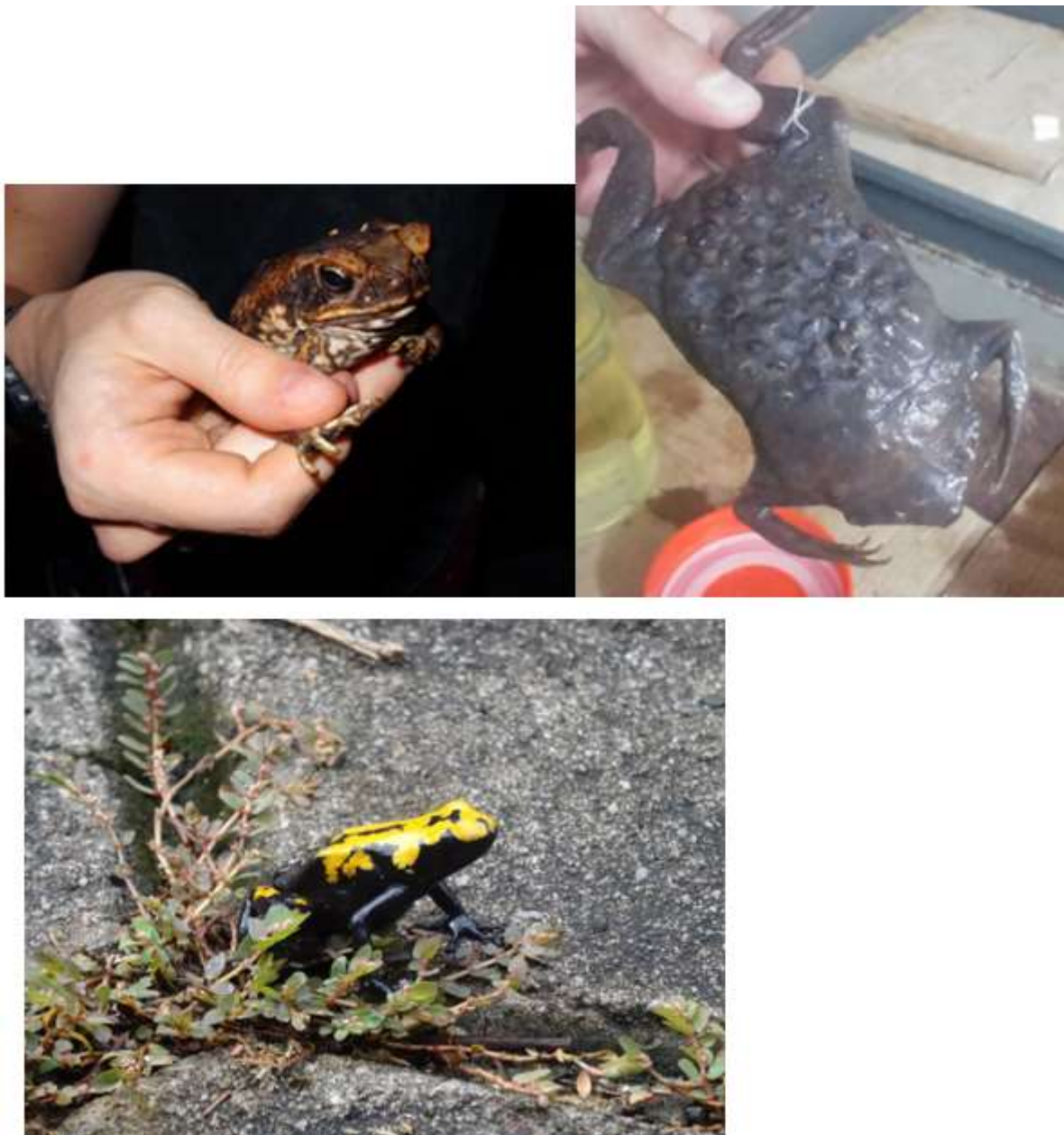
Appendix 1. Example of a trail thorough terra firme forest close to ECFn base. Photo taken by Matthew Coates



Appendix 2 Example of flooded forest habitat in Caxiuanã. Photo taken by Matthew Coates.



Appendix 3. Three examples of anuran species found in Caxiuanã. Top left: *Rhinella marina* found during the evening, close to the ECFPn base. Top right: Preserved *Pipa pipa* specimen from the herpetological archives in Museu Paraense Emilio Goeldi (MPEG). Bottom: *Adelphobates galactonus* found on site at ECFPn. All photographs taken by Matthew Coates.



Appendix 4. Jaccard's inverse index equation for the overall diversity of Caxiuanã, see Figure 4 for the Jaccard's equation.

Family	Genus	Species	total (n)	n(n-1)
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	52	2652
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	59	3422
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	343	117306
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	458	209306
Bufonidae	<i>Rhinella</i>	<i>marina</i>	16	240
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	1	0
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	37	1332
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	69	4692
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	139	19182
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	24	552
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	11	110
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	4	12
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	18	306
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	6
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	2	2
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	90
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	7	42
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	2	2
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	1	0
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	1	0
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	20	380
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	14	182
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	8	56
Hylidae	<i>Osteocephalus</i>	<i>taurus</i>	13	156
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	1	0
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	9	72
Hylidae	<i>Scinax</i>	<i>boesemani</i>	10	90
Hylidae	<i>Scinax</i>	<i>garbei</i>	4	12
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	23	506
Hylidae	<i>Scinax</i>	<i>ruber</i>	23	506
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0
Leptodactylidae	<i>Hydrotaetare</i>	<i>schmidtii</i>	1	0
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	6	30
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	72	5112
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	75	5550
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	26	650
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	31	930
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	17	272
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	2
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	26	650
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	5	20
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	3	6
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	1	0
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	52	2652
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	116	13340
Pipidae	<i>Pipa</i>	<i>pipa</i>	12	132
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	9	72
	Total	48	1838	390632

N	=	1838	$n(n-1)$	=	3376406
390632	/	3376406	=	0.1157	
1	-	0.115694617	=	0.8843	
		1-D	=	0.88	

Appendix 5. Jaccard's inverse index equations for the northern and southern communities in Caxiuanã. See figure 4 for the Jaccard's equations.

			North of Rio Caxiuana total (n)	n(n-1)	South of Rio caxiuana total (n)	n(n-1)
Aromobatidae	<i>Allobates</i>	<i>femoralis</i>	19	342	33	1056
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	14	182	45	1980
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	243	58806	97	9312
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	119	14042	338	113906
Bufonidae	<i>Rhinella</i>	<i>marina</i>	8	56	7	42
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	0	0	1	0
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	1	0	34	1122
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	28	756	41	1640
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	68	4556	67	4422
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	9	72	14	182
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	11	110	0	0
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	4	12	0	0
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	2	2	16	240
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	6	0	0
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	0	0	2	2
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	90	0	0
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	3	6	4	12
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	2	2	0	0
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	1	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	0	0	1	0
Hylidae	<i>Hypsiboas</i>	<i>wavrini</i>	20	380	0	0
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	14	182	0	0
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	2	2	6	30
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	6	30	7	42
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	0	0	1	0
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	8	56	1	0
Hylidae	<i>Scinax</i>	<i>boesemani</i>	10	90	0	0
Hylidae	<i>Scinax</i>	<i>garbei</i>	4	12	0	0
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	8	56	15	210
Hylidae	<i>Scinax</i>	<i>ruber</i>	22	462	1	0
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0	0	0
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0	0	0
Leptodactylidae	<i>Hydrolaetare</i>	<i>schmidtii</i>	1	0	0	0
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	3	6	3	6
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	6	30	66	4290
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	17	272	58	3306
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	10	90	15	210
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	24	552	7	42
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	6	30	11	110
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	2	0	0
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	0	0	26	650
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	0	0	5	20
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	0	0	3	6
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	0	0	1	0
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	7	42	45	1980
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	0	0	116	13340
Pipidae	<i>Pipa</i>	<i>pipa</i>	10	90	2	2
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	9	72	0	0
	Total	48	736	81496	1089	158160

	North				
N	=	736	$n(n-1)$	=	540960
81496	/	540960	=	0.150651	
1	-	0.1507	=	0.849349	
1-D	=	0.85			

South

N	=	1089	$n(n-1)$	=	1184832
158160	/	1184832	=	0.133487	
1	-	0.133487	=	0.866513	
1-D	=	0.87			

Appendix 6. Jaccard's inverse index equation for the diversity of the four assemblages in Caxiuanã. See figure 4 for Jaccard's equation.

Assemblages			Curua (n)	n(n-1)	Laranjal (n)	n(n-1)	PPBIO (n)	n(n-1)	IBAMA (n)	n(n-1)
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	15	210	4	12	33	1056	0	0
Aromobatidae	<i>Allobates</i>	<i>sp.</i>	13	156	1	0	44	1892	1	0
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	137	18632	106	11130	97	9312	0	0
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	103	10506	16	240	335	111890	3	6
Bufonidae	<i>Rhinella</i>	<i>marina</i>	6	30	2	2	1	0	6	30
Centrolenidae	<i>Vitreorana</i>	<i>ritae</i>	0	0	0	0	1	0	0	0
Ceratophryidae	<i>Ceratophrys</i>	<i>cornuta</i>	0	0	1	0	33	1056	1	0
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	24	552	4	12	31	930	0	0
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	64	4032	4	12	38	1406	13	156
Dendrobatidae	<i>Ranitomeya</i>	<i>amazonica</i>	9	72	0	0	14	182	0	0
Hylidae	<i>Dendropsophus</i>	<i>leucophyllatus</i>	0	0	11	110	0	0	0	0
Hylidae	<i>Dendropsophus</i>	<i>melanargyreus</i>	3	6	1	0	0	0	0	0
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	2	2	0	0	16	240	0	0
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	3	6	0	0	0	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	0	0	0	0	2	2	0	0
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	10	90	0	0	0	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	3	6	0	0	4	12	0	0
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	0	0	2	2	0	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	0	0	1	0	0	0	0	0
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	0	0	0	0	0	0	1	0
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	19	342	1	0	0	0	0	0
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	14	182	0	0	0	0	0	0
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	2	2	0	0	6	30	0	0
Hylidae	<i>Osteocephalus</i>	<i>taurus</i>	3	6	3	6	6	30	1	0
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	0	0	0	0	0	0	1	0
Hylidae	<i>Phyllomedusa</i>	<i>vaillantii</i>	8	56	0	0	1	0	0	0
Hylidae	<i>Scinax</i>	<i>boesemani</i>	2	2	8	56	0	0	0	0
Hylidae	<i>Scinax</i>	<i>garbei</i>	3	6	1	0	0	0	0	0
Hylidae	<i>Scinax</i>	<i>nebulosus</i>	6	30	2	2	13	156	2	2
Hylidae	<i>Scinax</i>	<i>ruber</i>	11	110	11	110	0	0	1	0
Hylidae	<i>Trachycephalus</i>	<i>resinifictrix</i>	1	0	0	0	0	0	0	0
Leptodactylidae	<i>Adenomera</i>	<i>hylaedactyla</i>	1	0	0	0	0	0	0	0
Leptodactylidae	<i>Hydrotaetare</i>	<i>schmidtii</i>	0	0	1	0	0	0	0	0
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	3	6	0	0	2	2	1	0
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	6	30	0	0	64	4032	2	2
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	7	42	10	90	58	3306	0	0
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	8	56	2	2	13	156	2	2
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	24	552	0	0	4	12	3	6
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	5	20	1	0	11	110	0	0
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	2	2	0	0	0	0	0	0
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	0	0	0	0	26	650	0	0
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	0	0	0	0	5	20	0	0
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	0	0	0	0	3	6	0	0
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	0	0	0	0	0	0	1	0
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	7	42	0	0	45	1980	0	0
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	0	0	0	0	115	13110	1	0
Pipidae	<i>Pipa</i>	<i>pipa</i>	9	72	1	0	2	2	0	0
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	0	0	9	72	0	0	0	0
	Total		48	533	203	11858	1023	151580	40	204

	Curua				
N	=	533	$n(n-1)$	=	283556
35858	/	283556	=	0.126458	
1	-	0.126458	=	0.873542	
1-D	=	0.87			

	Laranjal				
N	=	203	$n(n-1)$	=	41006
11858	/	41006	=	0.289177	
1	-	0.289177	=	0.710823	
	1-D	=	0.71		

	PBBIO				
N	=	1023	$n(n-1)$	=	1045506
151580	/	1045506	=	0.144982	
1	-	0.144982	=	0.855018	
1-D	=	0.85			

	IBAMA				
N	=	40	$n(n-1)$	=	1560
204	/	1560	=	0.130769	
1	-	0.130769	=	0.869231	
1-D	=	0.87			

Appendix 7. Full dataset showing species, location, habitat and microhabitat, date, collector.

Family	Genus	Species	location	Habitat	Microhabitat	Date	season	Decimal Longitude	Decimal Latitude	extra info	Distance from water	Collectors (added)	Collection number	Catalog number
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme		1997-10-22	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1313	15419
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.455219	-1.737679	ok	0.257	Henzl, M. J.; Galatti, U.	HERP 1951	8150
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Capoeira	Low vegetation	1996-03-14	Rainy	-51.455219	-1.737679	ok	0.257	Henzl, M. J.; Galatti, U.	HERP 1945	8144
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme	Low vegetation	1996-03-14	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1946	8145
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme	Low vegetation	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1971	8169
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1252	6521
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme		1992-10-26	Dry	-51.45361111	-1.73688889	ok	0.096	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2191	5900
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme	Litter	1992-11-12	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2123	5901
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Capoeira		1993-07-11	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1272	6570
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme		2002-04-11	Rainy	-51.457059	-1.737318	estimate	0.406	Miranda, Rosivaldo	HERP: 5256	15822
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Terra firme		2002-04-11	Rainy	-51.457059	-1.737318	estimate	0.406	Miranda, Rosivaldo	HERP: 5260	15825
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá	Capoeira		1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1479	15525
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá			1998-02-01	Rainy	-51.52333333	-1.76647222	ok	0.005	Ribeiro Jr., M. A.	JARB: 1479	15524
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1225	6714
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Curuá			1993-07-18	Dry			data deficient		Rocha, R. A. T.; Silva, R. R.	HERP 1170	6686
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Laranjal	Capoeira	Litter	1998-02-01	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1595	15574
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1587	15571
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1587	15572
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1587	15573
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 126	24234
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 250	24236
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 290	24237
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 412	24238
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-05	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 486	24239
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-06	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 505	24240
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 577	24241
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 604	24242
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 634	24243
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 722	24244
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 728	24245
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 765	24246
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 774	24247
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 796	24251
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 794	24250
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 790	24248
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 791	24249
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 891	24252
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 999	24254
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 990	24253
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1067	24255
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1110	24256
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-06-20	Rainy	-51.62464	-1.9772	ok	13.254	Ribeiro Jr., M. A.	MAR 1402	24257
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme		2007-06-30	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 217	24235
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-09-01	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Sturaro, M.	CAX 477	26837
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-09-05	Dry	-51.6422	-1.9943	ok	15.120	Gomes, J. O.; Sturaro, M.	CAX 553	26838
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-09-09	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Sturaro, M.	CAX 637	26839
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-09-11	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Sturaro, M.	CAX 658	26840
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-09-17	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Sturaro, M.	CAX 752	26841
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6216	-2.00054	ok	12.482	Gomes, J. O.; Maciel, A. O.	CAX 941	26843
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O.; Maciel, A. O.	CAX 910	26842
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-10-03	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 995	26844
Aromobatidae	<i>Allobates</i>	<i>femorialis</i>	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Maciel, A. O.	CAX 1081	26845

Aromobatidae	<i>Allobates</i>	sp.	IBAMA		Litter	1992-11-19	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Ávila-Pires, T. C. S.; Silva, R.	TCAP 2169	5894
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá			2002-05-22	Rainy	-51.457059	-1.737318	estimate	0.406	, Luiz	TCAP: 2686	15762
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-10	Rainy	-51.457257	-1.738	estimate	0.463	Henzl, M. J.; Galatti, U.	HERP 1903	8103
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-10	Rainy	-51.457257	-1.738	estimate	0.463	Henzl, M. J.; Galatti, U.	HERP 1904	8104
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-10	Rainy	-51.457257	-1.738	estimate	0.463	Henzl, M. J.; Galatti, U.	HERP 1905	8105
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-10	Rainy	-51.457257	-1.738	estimate	0.463	Henzl, M. J.; Galatti, U.	HERP 1906	8106
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme		1996-03-10	Rainy	-51.454779	-1.737259	estimate	0.190	Henzl, M. J.; Galatti, U.	HERP 1906A	8107
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-12	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1918	8117
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Litter	1996-03-12	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1920	8119
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Low vegetation	1996-03-12	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1919	8118
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.455219	-1.737679	ok	0.257	Henzl, M. J.; Galatti, U.	HERP 1950	8149
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Terra firme	Low vegetation	1996-03-15	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1962	8161
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá			2002-05-22	Rainy	-51.52333333	-1.76647222	estimate	0.005	Hoogmoed, M. S.; Ávila Pires, T. C. S.	TCAP: 2683	15759
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Curuá	Várzea	Litter	1992-10-28	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Ávila-Pires, T. C. S.; Silva, R.	TCAP 2014	5767
Aromobatidae	<i>Allobates</i>	sp.	Igarapé Laranjal			1998-02-06	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1473	15538
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 446	24528
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.64182	-1.97851	ok	15.106	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 706	24530
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.978	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 755	24531
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-03-22	Rainy	-51.6332	-1.9784	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 883	24532
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-03-28	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1079	24533
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-06-16	Rainy	-51.6332	-1.9789	ok	14.161	Ribeiro Jr., M. A.	MAR 1341	24535
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-06-16	Rainy	-51.6332	-1.9789	ok	14.161	Ribeiro Jr., M. A.	MAR 1340	24534
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 556	24529
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-08-06	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Silva, K. R. A.	CAX 150	26953
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Silva, K. R. A.	CAX 182	26954
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-01	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Sturaro, M.	CAX 481	26955
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Sturaro, M.	CAX 607	26956
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Sturaro, M.	CAX 608	26957
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Sturaro, M.	CAX 609	26958
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Sturaro, M.	CAX 610	26959
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Sturaro, M.	CAX 613	26960
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Sturaro, M.	CAX 614	26961
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Sturaro, M.	CAX 616	26962
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Sturaro, M.	CAX 617	26963
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O.; Sturaro, M.	CAX 620	26964
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.62464	-2.0015	ok	12.758	Gomes, J. O.; Sturaro, M.	CAX 624	26965
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-11	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Sturaro, M.	CAX 732	26971
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-15	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Sturaro, M.	CAX 710	26966
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-15	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Sturaro, M.	CAX 711	26967
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-16	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Sturaro, M.	CAX 728	26968
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-16	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O.; Sturaro, M.	CAX 730	26969
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-09-16	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O.; Sturaro, M.	CAX 731	26970
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 930	26975
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 931	26976
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 932	26977
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 933	26978
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Maciel, A. O.	CAX 928	26974
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.62464	-2.0033	ok	12.748	Gomes, J. O.; Maciel, A. O.	CAX 925	26973
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O.; Maciel, A. O.	CAX 918	26972
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 945	26979
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6216	-2.00054	ok	12.482	Gomes, J. O.; Maciel, A. O.	CAX 987	26983
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O.; Maciel, A. O.	CAX 1069	26984
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O.; Maciel, A. O.	CAX 1070	26985
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O.; Maciel, A. O.	CAX 1071	26986
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6234	-2.00054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 984	26982
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Maciel, A. O.	CAX 1082	26987
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Maciel, A. O.	CAX 970	26980
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Maciel, A. O.	CAX 1084	26988
Aromobatidae	<i>Allobates</i>	sp.	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O.; Maciel, A. O.	CAX 1087	26989
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	Igarapé Curuá	Baixio	Litter	2002-05-05	Rainy	-51.45614	-1.7366	estimate	0.279	, Equipe do curso de campo 2002	HERP: 5203	15769
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	Igarapé Curuá	Baixio	Litter	2002-05-05	Rainy	-51.45614	-1.7366	estimate	0.279	, Equipe do curso de campo 2002	HERP: 5207	15773
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	Igarapé Curuá	Baixio		2002-05-05	Rainy	-51.455144	-1.725806	estimate	0.112	, Equipe do curso de campo 2002	HERP: 5200	15766
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	Igarapé Curuá			2002-05-05	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002	HERP: 5204	15770

Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Baixo		2002-04-05	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia.	HERP: 5199	15765
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			2000-11-22	Dry			data deficient		, Grupo do curso de campo 2000.	Caxiuanã:003	11188
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			2000-11-22	Dry			data deficient		, Grupo do curso de campo 2000.	Caxiuanã:009	11189
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-01-16	Rainy	-51.459038	-1.736327	estimate	0.581	Avila-Pires, T. C. S.	TCAP 2186	5921
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-08-15	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1181	15362
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15636
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15637
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15638
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15639
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15640
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15641
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15642
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15643
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15644
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15645
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15646
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15647
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15648
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-01	Dry	-51.5198	-1.7605	estimate	0.687	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1609	15649
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-15	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1613	15627
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-17	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1608	15582
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15629
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15630
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15631
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15632
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15633
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15634
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1596	15635
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15653
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		2002-05-19	Rainy	-51.444672	-1.739457	estimate	0.020	Hernandez-Ruz, Emil	TCAP: 2670	15750
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6512
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6513
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6514
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6515
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6516
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6517
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6518
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6519
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6520
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6509
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6510
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6511
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5731
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5732
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5733
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5734
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5735

Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	jogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5736
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	jogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5737
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-27	Dry	-51.457579	-1.737763	estimate	0.497	jogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2004	5766
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-11-10	Dry	-51.457579	-1.737763	estimate	0.497	jogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2108	5866
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1244	6500
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1244	6501
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1244	6502
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6548
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6549
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6550
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6551
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6552
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6553
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6554
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6555
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6556
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6557
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6558
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6559
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1261	6560
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1282	6590
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1282	6591
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4588	-1.7273	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1279	6587
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4588	-1.7273	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1279	6588
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6574
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6575
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6576
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6577
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6578
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6579
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6580
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6581
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1274	6582
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-13	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1298	6601
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-15	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1319	6617
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-16	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1328	6637
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-20	Dry	-51.45832	-1.72648	estimate	0.346	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1353	6652
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-20	Dry	-51.45832	-1.72648	estimate	0.346	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1353	6653
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-22	Dry	-51.459103	-1.737338	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1367	6657
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1382	6664
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1382	6665
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1382	6666
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-27	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1398	6676
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-27	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1395	6673
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme		1993-07-27	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1395	6674
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-28	Dry	-51.4585	-1.7268	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1403	6678
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	2002-04-11	Rainy	-51.4561	-1.7366	estimate	0.279	Miranda, Rosivaldo	HERP: 5252	15820
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-10-11	Dry			data deficient		Montag, Luciano	Caxiuanã:014	11190
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1996-08-13	Dry	-51.459746	-1.736906	estimate	0.674	Pena, Antonio Nunes	HERP 2020	8242
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:021	11191
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:022	11192
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:027	11194
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:028	11195
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:029	11196
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:046	11197
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:048	11198
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá			2000-11-24	Dry			data deficient		Prudente, A. L. C.	Caxiuanã:050	11199
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Terra firme	Litter	1997-05-05	Rainy	-51.604629	-1.777144	estimate	0.135	Ribeiro Jr., M. A.	JARB: 1085	15318
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá		Litter	1997-12-07	Dry	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1468	15514
Bufonidae	Amazophrynnella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1585	15591

Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1585	15593
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1585	15594
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1585	15595
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Capoeira	Litter	1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Ribeiro Jr., M. A.	JARB: 1585	15596
Bufo	Amazophrynella	bokermanni	Igarapé Curuá		Litter	1997-10-21	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1308	15471
Bufo	Amazophrynella	bokermanni	Igarapé Curuá		Litter	1997-10-21	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1309	15472
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-10-24	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1332	15473
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-10-25	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1334	15474
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-08-16	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Vaz, F.	JARB: 1185	15363
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1442	15492
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1444	15493
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1445	15494
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1446	15495
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1447	15496
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1448	15497
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1449	15498
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1450	15499
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1451	15500
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1452	15501
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1453	15502
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1454	15503
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1455	15504
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1456	15505
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1997-11-04	Dry	-51.5217	-1.7625	estimate	0.370	Rocha, R. A. T.; Vaz, F.	JARB: 1457	15506
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			2003-11-08	Dry	-51.45361111	-1.73688889	ok	0.096	Vilar, Janilson		16008
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira	Litter	1997-08-23	Dry	-51.3328	-1.6586	estimate	0.097	, Moradores Locais	JARB: 1281	15410
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira	Litter	1997-08-23	Dry	-51.3328	-1.6586	estimate	0.097	, Moradores Locais	JARB: 1284	15411
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira	Litter	1997-08-23	Dry	-51.3328	-1.6586	estimate	0.097	, Moradores Locais	JARB: 1285	15412
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal			1997-06-30	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1147	15219
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal			1997-06-30	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1151	15220
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal			1997-06-30	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1152	15221
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal			1997-06-30	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1154	15222
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Igapó		1997-08-21	Dry	-51.3417	-1.6578	estimate	0.996	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1193	15364
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1997-12-10	Dry	-51.453642	-1.736551	estimate	0.062	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1615	15579
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15616
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15617
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15618
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15619
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15620
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15621
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15622
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15623
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1590	15624
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15602
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15603
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15604
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15605
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15606
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15607
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15608
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15609
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15610
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15611
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15612
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15613
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15614
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Terra firme	Litter	1998-02-01	Rainy	-51.5187	-1.7577	estimate	0.973	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1602	15615
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira	Litter	1998-04-04	Rainy	-51.3345	-1.6611	estimate	0.109	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1531	15704
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1550	15546
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1551	15547
Bufo	Amazophrynella	bokermanni	Igarapé Laranjal	Capoeira		1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1552	15548

Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1998-04-06	Rainy	-51.3335	-1.6609	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1557	15549
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1998-04-06	Rainy	-51.3335	-1.6609	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1558	15550
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira	Litter	1998-04-07	Rainy	-51.3352	-1.6611	estimate	0.170	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1574	15553
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira	Litter	1998-04-07	Rainy	-51.3352	-1.6611	estimate	0.170	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1575	15554
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1998-04-07	Rainy	-51.3375	-1.6623	estimate	0.397	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1571	15551
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1998-04-07	Rainy	-51.3375	-1.6623	estimate	0.397	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1573	15552
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1249	15394
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1250	15395
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1251	15396
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1252	15397
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1253	15398
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1254	15399
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1255	15400
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1256	15401
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1257	15402
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1258	15403
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1262	15404
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1263	15405
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1265	15406
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1266	15407
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1267	15408
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-23	Dry	-51.3471	-1.6594	estimate	1.496	Braga, I. C.	JARB: 1268	15409
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira	Litter	1997-08-25	Dry	-51.34694444	-1.657	estimate	1.556	Gonçalves, R. C.	JARB: 1290	15413
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira	Litter	1997-08-25	Dry	-51.34694444	-1.657	estimate	1.556	Gonçalves, R. C.	JARB: 1300	15414
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-29	Dry	-51.3343	-1.6618	estimate	0.109	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1367	15481
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-29	Dry	-51.3343	-1.6618	estimate	0.109	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1368	15482
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-30	Dry	-51.3343	-1.6618	estimate	0.109	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1377	15484
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme		1997-10-30	Dry	-51.3458	-1.6607	estimate	1.335	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1385	15483
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme		1997-10-30	Dry	-51.3458	-1.6607	estimate	1.335	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1388	15485
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme		1997-10-30	Dry	-51.3458	-1.6607	estimate	1.335	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1389	15486
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Terra firme		1997-10-30	Dry	-51.3458	-1.6607	estimate	1.335	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1401	15487
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-11-01	Dry	-51.3343	-1.6618	estimate	0.109	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1408	15488
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-11-02	Dry	-51.34694444	-1.657	estimate	1.556	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1423	15489
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-11-02	Dry	-51.34694444	-1.657	estimate	1.556	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1424	15490
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-11-02	Dry	-51.34694444	-1.657	estimate	1.556	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1425	15491
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1341	15475
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1354	15476
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1355	15477
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1356	15478
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1357	15479
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Capoeira		1997-10-28	Dry	-51.34694444	-1.657	estimate	1.556	ocha, R. A. T.; Bernardi, J. A. R.; Souza, J. R.	JARB: 1361	15480
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1204	15365
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1205	15366
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1206	15367
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1207	15368
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1208	15369
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1209	15370
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1210	15371
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1211	15372
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1212	15373
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1213	15374
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1214	15375
Bufonidae	<i>Amazophrynnella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, E. C.	JARB: 1215	15376

Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1216	15377
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1217	15378
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1219	15379
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1220	15380
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1221	15381
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1222	15382
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1223	15383
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1224	15384
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1226	15385
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1227	15386
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1228	15387
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Igapó	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1235	15388
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1245	15391
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1246	15392
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal	Terra firme	Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1244	15393
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal		Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1238	15389
Bufonidae	<i>Amazophrynella bokermanni</i>	Igarapé Laranjal		Litter	1997-08-22	Dry	-51.3442	-1.657	estimate	1.267	T.; de Souza, I. C. R.; Gonçalves, E. C.; Gonçalves, I. C. R.	JARB: 1242	15390
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 134	24609
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 145	24610
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 247	24615
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 242	24614
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 236	24613
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 228	24611
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 232	24612
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 303	24616
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 400	24623
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 401	24624
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 402	24625
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 394	24619
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 395	24620
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 396	24621
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 397	24622
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 333	24618
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 322	24617
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 442	24628
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 443	24629
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 444	24630
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 416	24626
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 417	24627
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 473	24634
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 476	24635
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 477	24636
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 478	24637
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 462	24633
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 455	24631
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 456	24632
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 480	24638
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-05	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 488	24640
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-05	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 489	24641
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-05	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 482	24639
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-06	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 517	24642
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-06	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 518	24643
Bufonidae	<i>Amazophrynella bokermanni</i>	PPBIO plot	Terra firme		2007-02-07	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 525	24644

Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 600	24655
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 584	24654
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 576	24653
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 574	24651
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 575	24652
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 610	24658
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 611	24659
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 601	24656
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 602	24657
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 675	24661
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 637	24660
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-12	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 679	24664
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-12	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 676	24662
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-12	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 677	24663
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-02-13	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 692	24665
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 727	24666
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 717	29075
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 764	24669
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 771	24670
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 746	24668
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 745	24667
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 777	24672
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 771	24671
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 807	24675
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 797	24673
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 801	24674
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-22	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 877	24676
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 991	24677
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-28	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1070	24678
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1155	24682
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1150	24681
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1144	24679
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1145	24680
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1202	24683
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-06-24	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1202	24684
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 542	24650
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 526	24645
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 527	24646
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 528	24647
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 529	24648
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 530	24649
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-08-17	Dry	-51.65111	-1.96028	estimate	16.435	Gomes, J. O. ; Silva, K. R. A.	CAX 394	27014
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-08-20	Dry	-51.6514	-1.9638	ok	16.453	Gomes, J. O. ; Silva, K. R. A.	CAX 437	27015
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-08-20	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O. ; Sturaro, M.	CAX 475	27018
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-08-20	Dry	-51.6422	-1.9969	ok	15.442	Gomes, J. O. ; Sturaro, M.	CAX 473	27017
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-08-20	Dry	-51.6514	-1.9638	ok	16.453	Gomes, J. O. ; Sturaro, M.	CAX 454	27016
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O. ; Sturaro, M.	CAX 505	27020
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.6422	-1.9969	ok	15.442	Gomes, J. O. ; Sturaro, M.	CAX 495	27019
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-03	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O. ; Sturaro, M.	CAX 521	27021
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-06	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O. ; Sturaro, M.	CAX 567	27022
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-10	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O. ; Sturaro, M.	CAX 649	27023
Bufonidae	<i>Amazophrynella</i>	<i>bokermanni</i>	PPBIO plot	Terra firme	Litter	2007-09-13	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Sturaro, M.	CAX 690	27024

Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-09-16	Dry	-51.6422	-1.9952	ok	15.127	Gomes, J. O.; Sturaro, M.	CAX 721	27025
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-09-29	Dry	-51.6234	-2.0054	ok	12.663	Gomes, J. O.; Maciel, A. O.	CAX 818	27026
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-09-30	Dry	-51.6422	-1.9943	ok	15.120	Gomes, J. O.; Maciel, A. O.	CAX 859	27028
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-09-30	Dry	-51.6514	-1.9719	ok	16.306	Gomes, J. O.; Maciel, A. O.	CAX 843	27027
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Maciel, A. O.	CAX 980	26981
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-10-11	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Maciel, A. O.	CAX 1133	27029
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-10-11	Dry	-51.63777778	-1.96028	estimate	14.925	Gomes, J. O.; Maciel, A. O.	CAX 1158	27030
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-10-13	Dry	-51.6511	-1.9605	estimate	16.331	Gomes, J. O.; Maciel, A. O.	CAX 1173	27031
Bufo	Amazophrynella	bokermanni	PPBIO plot	Terra firme	Litter	2007-10-14	Dry	-51.6456	-1.96028	estimate	15.868	Gomes, J. O.; Maciel, A. O.	CAX 1188	27032
Bufo	Amazophrynella	bokermanni				2002-01-01	Rainy			data deficient		Praxedes, C.		17432
Bufo	Amazophrynella	bokermanni				2002-01-01	Rainy			data deficient		Praxedes, C.		17433
Bufo	Amazophrynella	bokermanni				2002-01-01	Rainy			data deficient		Praxedes, C.		17434
Bufo	Rhinella	magnussoni	IBAMA		Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1326	6634
Bufo	Rhinella	magnussoni	IBAMA		Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1326	6635
Bufo	Rhinella	magnussoni	IBAMA		Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1327	6636
Bufo	Rhinella	magnussoni	Igarapé Curuá			1997-02-01	Rainy			data deficient		, Alunos da FCAP		8371
Bufo	Rhinella	magnussoni	Igarapé Curuá	Baixio	Litter	2002-05-05	Rainy	-51.455144	-1.725806	estimate	0.112	, Equipe do curso de campo 2002	HERP: 5201	15767
Bufo	Rhinella	magnussoni	Igarapé Curuá		Litter	2002-05-05	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002	HERP: 5202	15768
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	2002-04-09	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5239	15805
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	2002-04-10	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5251	15816
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		2002-04-11	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5264	15829
Bufo	Rhinella	magnussoni	Igarapé Curuá	Baixio		2002-05-07	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia	HERP: 5224	15790
Bufo	Rhinella	magnussoni	Igarapé Curuá			1995-11-06	Dry			data deficient		Almeida, Samuel		7612
Bufo	Rhinella	magnussoni	Igarapé Curuá			1997-06-29	Rainy	-51.4554	-1.7366	ok	0.204	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1138	15310
Bufo	Rhinella	magnussoni	Igarapé Curuá			1997-12-18	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15654
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15657
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15658
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15659
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15660
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.		15661
Bufo	Rhinella	magnussoni	Igarapé Curuá	Capoeira	Litter	1998-03-31	Rainy	-51.5241	-1.7665	estimate	0.050	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1520	15701
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		1997-08-12	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.; Vaz, F.	JARB: 1168	15359
Bufo	Rhinella	magnussoni	Igarapé Curuá	Igapó	Litter	1996-08-10	Dry	-51.453642	-1.736551	estimate	0.062	Guimarães, D. D. S.	HERP 2009	8235
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-10	Rainy	-51.457257	-1.738	estimate	0.463	Henzl, M. J.; Galatti, U.	HERP 1899	8100
Bufo	Rhinella	magnussoni	Igarapé Curuá		Litter	1996-03-10	Rainy	-51.448975	-1.792727	estimate	0.066	Henzl, M. J.; Galatti, U.	HERP 1911	8110
Bufo	Rhinella	magnussoni	Igarapé Curuá	Capoeira		1996-03-11	Rainy	-51.454779	-1.737259	estimate	0.190	Henzl, M. J.; Galatti, U.	HERP 1912	8111
Bufo	Rhinella	magnussoni	Igarapé Curuá	Capoeira	Litter	1996-03-12	Rainy	-51.443653	-1.768019	estimate	0.604	Henzl, M. J.; Galatti, U.	HERP 1925	8124
Bufo	Rhinella	magnussoni	Igarapé Curuá	Capoeira		1996-03-12	Rainy	-51.454779	-1.737259	estimate	0.190	Henzl, M. J.; Galatti, U.	HERP 1928	8127
Bufo	Rhinella	magnussoni	Igarapé Curuá	Capoeira	Litter	1996-03-13	Rainy	-51.4543	-1.737	ok	0.134	Henzl, M. J.; Galatti, U.	HERP 1935	8134
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-13	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1931	8130
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-14	Rainy	-51.45656	-1.737296	ok	0.362	Henzl, M. J.; Galatti, U.	HERP 1952	8151
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1980	8179
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1981	8180
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1991	8191
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		2002-05-19	Rainy	-51.444672	-1.739457	estimate	0.020	Hernandez-Ruz, Emil	TCAP: 2668	15748
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		2002-05-19	Rainy	-51.444672	-1.739457	estimate	0.020	Hernandez-Ruz, Emil	TCAP: 2669	15749
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		2002-05-19	Rainy	-51.444672	-1.739457	estimate	0.020	Hernandez-Ruz, Emil	TCAP: 2671	15751
Bufo	Rhinella	magnussoni	Igarapé Curuá	Terra firme		2002-05-20	Rainy	-51.444672	-1.739457	estimate	0.020	Hernandez-Ruz, Emil	TCAP: 2674	15752
Bufo	Rhinella	magnussoni	Igarapé Curuá			2002-05-22	Rainy	-51.52333333	-1.76647222	estimate	0.005	Hernandez-Ruz, Emil	TCAP: 2685	15761
Bufo	Rhinella	magnussoni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1250	6507
Bufo	Rhinella	magnussoni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1250	6508
Bufo	Rhinella	magnussoni	Igarapé Curuá			1993-07-18	Dry			data deficient		Hoogmoed, M. S.	HERP 1340	6643

Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá	Baixio		1996-08-10	Dry	-51.453953	-1.72393	estimate	0.291	Rocha, R. A. T.	HERP 2017	8241
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá	Terra firme		1996-08-10	Dry	-51.456592	-1.723866	estimate	0.318	Rocha, R. A. T.	HERP 2012	8236
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-19	Rainy	-51.459038	-1.736327	estimate	0.581	Rocha, R. A. T.; Silva, R. R.	HERP 1181	6693
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-22	Rainy	-51.4445	-1.7371	estimate	0.165	Rocha, R. A. T.; Silva, R. R.	HERP 1186	6698
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-22	Rainy	-51.4445	-1.7371	estimate	0.165	Rocha, R. A. T.; Silva, R. R.	HERP 1187	6699
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1213	6710
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1229	6716
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1230	6717
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-29	Rainy	-51.4422	-1.7471	estimate	0.149	Rocha, R. A. T.; Silva, R. R.	HERP 1235	6720
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1993-04-30	Rainy	-51.4452	-1.7463	estimate	0.359	Rocha, R. A. T.; Silva, R. R.	HERP 1236	6721
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá	Terra firme		1997-10-22	Dry	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Vaz, F.	JARB: 1436	15420
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá	Capoeira		1997-11-04	Dry	-51.523	-1.7668	estimate	0.010	Rocha, R. A. T.; Vaz, F.	JARB: 1433	15422
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá	Capoeira		1997-11-04	Dry	-51.523	-1.7668	estimate	0.010	Rocha, R. A. T.; Vaz, F.	JARB: 1437	15423
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Curuá			1994-04-15	Rainy			data deficient		Silva, R. R.; Junior, Arlindo		6948
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal			1997-06-30	Rainy	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1155	15311
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal		Litter	1997-07-01	Dry	-51.34694444	-1.657	ok	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1157	15312
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Igapó	Litter	1997-10-31	Dry	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1399	15421
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira		1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1556	15541
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-04-24	Rainy	-51.334	-1.6594	estimate	0.132	Ribeiro Jr., M. A.	JARB: 1001	15268
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-04-24	Rainy	-51.334	-1.6594	estimate	0.132	Ribeiro Jr., M. A.	JARB: 1014	15269
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-04-24	Rainy	-51.334	-1.6594	estimate	0.132	Ribeiro Jr., M. A.	JARB: 1015	15270
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-04-24	Rainy	-51.4545	-1.7369	ok	0.142	Ribeiro Jr., M. A.	JARB: 1016	15271
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Terra firme	Litter	1997-04-28	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB: 1073	15290
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-01	Rainy	-51.34694444	-1.65694444	ok	1.549	Ribeiro Jr., M. A.	JARB: 1080	15272
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-01	Rainy	-51.34694444	-1.65694444	ok	1.549	Ribeiro Jr., M. A.	JARB: 1082	15273
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-05	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1102	15283
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-05	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1103	15284
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-05	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1106	15285
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-05	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1107	15286
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	Igarapé Laranjal	Capoeira	Litter	1997-05-05	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1109	15287
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-27	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 98	24258
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-28	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 101	24259
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 112	24264
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 119	24265
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 120	24266
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 122	24267
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 123	24268
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 128	24269
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 129	24270
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 130	24271
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 131	24272
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 135	24273
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 136	24274
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 103	24260
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 107	24262
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 106	24261
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 109	24263
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 171	24293
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 167	24292
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 165	24290
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 166	24291
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 160	24287

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	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-01	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 315	24384
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 383	24396
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 384	24397
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 387	24398
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 390	24399
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 391	24400
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 355	24395
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 337	24393
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 338	24394
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 327	24388
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 328	24389
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 329	24390
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 334	24391
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 335	24392
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 324	24386
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 325	24387
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 321	24385
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 323	29077
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 435	24409
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 433	24408
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 436	24410
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 437	24411
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 425	24407
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 421	24406
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 414	24404
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 415	24405
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 411	24402
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	2007-02-03	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 413	2

Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 580	24437
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 609	24445
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-09	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 603	24444
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-10	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 623	24448
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-10	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 616	24447
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-10	Rainy	-51.6557	-1.96028	ok	16.965	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 615	24446
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 664	24452
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 648	24451
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 630	24449
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 631	24450
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-12	Rainy	-51.6522	-1.96028	ok	16.607	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 690	24453
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-02-13	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 694	24454
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-03-16	Rainy	-51.63777778	-2.00054	estimate	14.222	Candiani, D. S. ; Carvalho, L. S.	MAR 729	24455
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-03-17	Rainy	-51.6199	-1.9871	ok	12.609	Carvalho, L. S.	MAR 742	24456
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-03-17	Rainy	-51.6289	-1.9871	ok	13.566	Carvalho, L. S.	MAR 743	24457
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-03-17	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 772	24464
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 760	24460
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 767	24461
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 768	24462
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 769	24463
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 754	24459
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-18	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 751	24458
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 785	24465
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.6539	-1.96028	ok	16.789	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 788	24466
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 862	24467
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 865	24468
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-22	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 887	24469
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 926	24471
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 899	24470
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 983	24472
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1002	24473
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1047	24474
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-28	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1078	24475
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1114	24476
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1188	24477
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1214	24478
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-08	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Avila-Pires, T. C. S.	CAX 01	26846
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-08	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Avila-Pires, T. C. S.	CAX 02	26847
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-08	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Avila-Pires, T. C. S.	CAX 03	26848
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-09	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1260	24480
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-09	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Abrantes, S. F. H.	MAR 1256	24479
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-10	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Avila-Pires, T. C. S.	CAX 14	26849
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-10	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.	MAR 1275	24482
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-10	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.	MAR 1266	24481
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Avila-Pires, T. C. S.	CAX 17	26850
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-12	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.	MAR 1316	24483
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.	MAR 1372	24485
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.	MAR 1364	24484
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.	MAR 1383	24487
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.	MAR 1382	24486
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme		2007-06-20	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.	MAR 1406	24488
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot			2007-06-21	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.	CAX 35	26851

Bufo	Rhinella	magnussoni	PPBIO plot			2007-06-23	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.	CAX 40	26852
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-06-24	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1431	24489
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-06-26	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1458	24491
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-06-26	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1456	24490
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-06-26	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1459	24492
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 565	24434
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 567	24435
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 541	24433
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 539	24432
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 534	24430
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 535	24431
Bufo	Rhinella	magnussoni	PPBIO plot			2007-07-02	Dry	-51.63777778	-1.96021111	estimate	14.925	Silva, A. S. B.	MAR 572	24436
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O. ; Silva, K. R. A.	CAX 63	26853
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O. ; Silva, K. R. A.	CAX 64	26854
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6422	-1.9889	ok	15.114	Gomes, J. O. ; Silva, K. R. A.	CAX 91	26856
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6422	-1.9889	ok	15.114	Gomes, J. O. ; Silva, K. R. A.	CAX 92	26857
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6422	-1.9943	ok	15.120	Gomes, J. O. ; Silva, K. R. A.	CAX 101	26859
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6422	-1.9961	ok	15.442	Gomes, J. O. ; Silva, K. R. A.	CAX 96	26858
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6514	-1.9638	ok	16.453	Gomes, J. O. ; Silva, K. R. A.	CAX 73	26855
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-05	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O. ; Silva, K. R. A.	CAX 120	26861
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-05	Dry	-51.6514	-1.9659	estimate	16.432	Gomes, J. O. ; Silva, K. R. A.	CAX 110	26860
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-06	Dry	-51.6153	-1.9825	estimate	12.109	Gomes, J. O. ; Silva, K. R. A.	CAX 143	26863
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-06	Dry	-51.6514	-1.9683	ok	16.404	Gomes, J. O. ; Silva, K. R. A.	CAX 131	26862
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O. ; Silva, K. R. A.	CAX 184	26870
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O. ; Silva, K. R. A.	CAX 189	26871
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O. ; Silva, K. R. A.	CAX 177	26868
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6332	-1.96021111	estimate	14.440	Gomes, J. O. ; Silva, K. R. A.	CAX 178	26869
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6422	-1.9943	ok	15.120	Gomes, J. O. ; Silva, K. R. A.	CAX 171	26866
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O. ; Silva, K. R. A.	CAX 157	26865
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-07	Dry	-51.6422	-1.9961	ok	15.442	Gomes, J. O. ; Silva, K. R. A.	CAX 175	26867
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.	CAX 222	26875
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.	CAX 223	26876
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O. ; Silva, K. R. A.	CAX 212	26873
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.6422	-1.9898	ok	15.106	Gomes, J. O. ; Silva, K. R. A.	CAX 196	26872
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.6514	-1.9674	ok	16.411	Gomes, J. O. ; Silva, K. R. A.	CAX 215	26874
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.	CAX 242	26878
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.	CAX 243	26879
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.6422	-1.9961	ok	15.442	Gomes, J. O. ; Silva, K. R. A.	CAX 229	26877
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-10	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O. ; Silva, K. R. A.	CAX 267	26880
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-11	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O. ; Silva, K. R. A.	CAX 277	26881
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-13	Dry	-51.6153	-1.9825	estimate	12.109	Gomes, J. O. ; Silva, K. R. A.	CAX 312	26882
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-13	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O. ; Silva, K. R. A.	CAX 321	26883
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-13	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O. ; Silva, K. R. A.	CAX 328	26884
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Silva, K. R. A.	CAX 350	26887
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Silva, K. R. A.	CAX 353	26888
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.6422	-1.9906	ok	15.089	Gomes, J. O. ; Silva, K. R. A.	CAX 334	26885
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.6422	-1.9969	ok	15.442	Gomes, J. O. ; Silva, K. R. A.	CAX 337	26886
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-15	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O. ; Silva, K. R. A.	CAX 362	26889
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-16	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Silva, K. R. A.	CAX 376	26891
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-16	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Silva, K. R. A.	CAX 377	26892
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-16	Dry	-51.6514	-1.9674	ok	16.411	Gomes, J. O. ; Silva, K. R. A.	CAX 373	26890
Bufo	Rhinella	magnussoni	PPBIO plot	Terra firme	Litter	2007-08-17	Dry	-51.65111	-1.96028	estimate	16.435	Gomes, J. O. ; Silva, K. R. A.	CAX 392	26893

Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-08-20	Dry	-51.6514	-1.9647	ok	16.430	Gomes, J. O.; Silva, K. R. A.	CAX 438	26894
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-01	Dry	-51.6422	-1.9915	ok	15.097	Gomes, J. O.; Sturaro, M.	CAX 468	26895
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-01	Dry	-51.6422	-1.9934	ok	15.116	Gomes, J. O.; Sturaro, M.	CAX 469	26896
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.62464	-2.0024	ok	12.754	Gomes, J. O.; Sturaro, M.	CAX 499	26899
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.62464	-1.96876	estimate	13.319	Gomes, J. O.; Sturaro, M.	CAX 500	26900
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Sturaro, M.	CAX 503	26901
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Sturaro, M.	CAX 507	26902
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.6422	-1.9889	ok	15.114	Gomes, J. O.; Sturaro, M.	CAX 487	26897
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Sturaro, M.	CAX 489	26898
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-03	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Sturaro, M.	CAX 516	26903
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-04	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Sturaro, M.	CAX 538	26904
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-05	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Sturaro, M.	CAX 556	26907
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-05	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Sturaro, M.	CAX 557	26908
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-05	Dry	-51.6422	-1.9925	ok	15.104	Gomes, J. O.; Sturaro, M.	CAX 542	26905
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-05	Dry	-51.6422	-1.9934	ok	15.116	Gomes, J. O.; Sturaro, M.	CAX 543	26906
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-07	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.; Sturaro, M.	CAX 586	26909
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6216	-2.00054	ok	12.482	Gomes, J. O.; Sturaro, M.	CAX 606	26912
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6422	-1.9925	ok	15.104	Gomes, J. O.; Sturaro, M.	CAX 600	26910
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-08	Dry	-51.6422	-1.9969	ok	15.442	Gomes, J. O.; Sturaro, M.	CAX 604	26911
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-09	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Sturaro, M.	CAX 635	26913
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-10	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Sturaro, M.	CAX 653	26914
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-11	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Sturaro, M.	CAX 723	26916
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-11	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Sturaro, M.	CAX 665	26915
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-09-29	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 826	26917
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O.; Maciel, A. O.	CAX 936	26920
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6422	-1.9969	ok	15.442	Gomes, J. O.; Maciel, A. O.	CAX 906	26919
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6514	-1.9719	ok	16.306	Gomes, J. O.; Maciel, A. O.	CAX 886	26918
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6514	-1.9719	ok	16.306	Gomes, J. O.; Silva, K. R. A.	CAX 955	26864
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Maciel, A. O.	CAX 983	26925
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.62464	-2.0015	ok	12.758	Gomes, J. O.; Maciel, A. O.	CAX 975	26923
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.62464	-2.0015	ok	12.758	Gomes, J. O.; Maciel, A. O.	CAX 976	26924
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 989	26926
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 990	26927
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Maciel, A. O.	CAX 955	26782
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Maciel, A. O.	CAX 965	26922
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.6514	-1.9638	ok	16.453	Gomes, J. O.; Maciel, A. O.	CAX 963	26921
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-03	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Maciel, A. O.	CAX 1006	26928
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-04	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Maciel, A. O.	CAX 1021	26929
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Maciel, A. O.	CAX 1048	26931
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.62464	-2.0015	ok	12.758	Gomes, J. O.; Maciel, A. O.	CAX 1045	26930
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Maciel, A. O.	CAX 1050	26932
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.62464	-1.9988	ok	12.840	Gomes, J. O.; Maciel, A. O.	CAX 1051	26933
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Maciel, A. O.	CAX 1083	26937
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.62464	-2.0015	ok	12.758	Gomes, J. O.; Maciel, A. O.	CAX 1080	26936
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O.; Maciel, A. O.	CAX 1060	26935
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6514	-1.9656	ok	16.432	Gomes, J. O.; Maciel, A. O.	CAX 1057	26934
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-09	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Maciel, A. O.	CAX 1118	26938
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-11	Dry	-51.6543	-1.9691	estimate	16.627	Gomes, J. O.; Maciel, A. O.	CAX 1145	26939
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-11	Dry	-51.6543	-1.9691	estimate	16.627	Gomes, J. O.; Maciel, A. O.	CAX 1146	26940
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-12	Dry	-51.6514	-1.9647	ok	16.430	Gomes, J. O.; Maciel, A. O.	CAX 1151	26949
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>	PPBIO plot	Terra firme	Litter	2007-10-12	Dry	-51.6543	-1.9691	estimate	16.627	Gomes, J. O.; Maciel, A. O.	CAX 1156	26950
Bufonidae	<i>Rhinella</i>	<i>magnussoni</i>				1994-06-11	Rainy			data deficient		Hoogmoed, M. S.	HERP 1790	7099

Bufo	Rhinella	marina	IBAMA			1992-10-22	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1950	5742
Bufo	Rhinella	marina	IBAMA			1992-10-22	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1950	5743
Bufo	Rhinella	marina	IBAMA			2003-12-02	Dry	-51.434072	-1.792341	estimate	0.112	Pezutti, J.		17410
Bufo	Rhinella	marina	IBAMA			2003-12-02	Dry	-51.434072	-1.792341	estimate	0.112	Pezutti, J.		17411
Bufo	Rhinella	marina	IBAMA			2003-12-02	Dry	-51.434072	-1.792341	estimate	0.112	Pezutti, J.		17412
Bufo	Rhinella	marina	IBAMA			2003-12-02	Dry	-51.434072	-1.792341	estimate	0.112	Pezutti, J.		17413
Bufo	Rhinella	marina	Igarapé Curuá	Capoeira	Litter	1996-03-10	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1896	8097
Bufo	Rhinella	marina	Igarapé Curuá	Capoeira		1996-03-13	Rainy	-51.4548	-1.7372	ok	0.185	Henzl, M. J.; Galatti, U.	HERP 1943	8142
Bufo	Rhinella	marina	Igarapé Curuá	Capoeira		1993-07-17	Dry	-51.45361111	-1.73688889	ok	0.096	Hoogmoed, M. S.; Moraes, R. J. R.	HERP 1335	6639
Bufo	Rhinella	marina	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1281	6589
Bufo	Rhinella	marina	Igarapé Curuá			1997-04-22	Rainy	-51.4545	-1.7369	ok	0.142	Ribeiro Jr., M. A.	JARB: 952	15308
Bufo	Rhinella	marina	Igarapé Curuá			2001-10-07	Dry			data deficient		Vaz, Flavio; Martins, M.	AKITA: 69	14493
Bufo	Rhinella	marina	Igarapé Laranjal			1997-08-21	Dry	-51.3426	-1.6569	estimate	1.103	Rocha, R. A. T.	JARB: 1201	15326
Bufo	Rhinella	marina	Igarapé Laranjal			1997-08-21	Dry	-51.3426	-1.6569	estimate	1.103	Rocha, R. A. T.	JARB: 1202	15327
Bufo	Rhinella	marina	PPBIO plot					-51.6336	-1.9835	estimate	14.204	Ribeiro-Jr., M. A.	CAX 1190	26951
Bufo	Rhinella	marina			Litter	1992-10-25	Dry			data deficient		Hoogmoed, M. S.; Avila-Pires, T. C. S.	TCAP 1985	5933
Centrolenidae	Vitreorana	riteae	PPBIO plot			2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Avila-Pires, T. C. S.; Gomes, J. O.	CAX 23	26952
Ceratophryidae	Ceratophrys	cornuta	IBAMA			1993-07-22	Dry	-51.4375	-1.8725	ok	0.395	Seabra, Paulo	HERP 1372	6661
Ceratophryidae	Ceratophrys	cornuta	Igarapé Laranjal			1998-05-01	Rainy	-51.34694444	-1.657	estimate	1.556	Rael, J.; Souza, C.		15625
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 369	24497
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 358	24494
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 359	24495
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 360	24496
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 343	24493
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 649	24499
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 645	24498
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 700	24500
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 714	24501
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 715	24502
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 719	24504
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 720	24505
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 721	24506
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 717	24503
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 815	24507
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 816	24508
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 817	24509
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 818	24510
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 996	24511
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 997	24512
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1044	24513
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1170	24518
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1158	24515
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1159	24516
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1160	24517
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1157	24514
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1238	24520
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1239	24521
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1240	24522
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1241	24523
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.	MAR 1232	24519
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-13	Rainy	-51.6332	-1.9735	ok	14.213	Ribeiro Jr., M. A.	MAR 1306	24524
Ceratophryidae	Ceratophrys	cornuta	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.	MAR 1394	24525

Ceratophryidae	Ceratophrys	cornuta		Terra firme	Litter	2004-04-09	Rainy			data deficient	Maschio, G.F.; da Silva, M.A.A.; de Souza, A.C.B.; V	CAIÇ: 054	17414	
Ceratophryidae	Ceratophrys	cornuta		Terra firme		2004-04-10	Rainy			data deficient	Maschio, G.F.; da Silva, M.A.A.; de Souza, A.C.B.; V	CAIÇ: 054	17415	
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1998-03-31	Rainy	-51.5217	-1.7645	estimate	0.240	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1519	16184
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1996-03-12	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1922	8121
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1996-03-14	Rainy	-51.45361111	-1.73688889	estimate	0.096	Henzl, M. J.; Galatti, U.	HERP 1947	8146
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1996-03-14	Rainy	-51.45361111	-1.73688889	estimate	0.096	Henzl, M. J.; Galatti, U.	HERP 1948	8147
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Low vegetation	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1974	8173
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Low vegetation	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1975	8174
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1989	8189
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1990	8190
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme		2002-05-17	Rainy	-51.52333333	-1.76647222	estimate	0.005	Hoogmoed, M. S.; Ávila Pires, T. C. S.	TCAP: 2663	15746
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1993-07-18	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.	HERP 1337	6640
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1288	6595
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme		1993-07-14	Dry	-51.4588	-1.7273	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1310	6614
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Low vegetation	1993-07-24	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1388	6671
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme	Litter	1993-07-28	Dry	-51.4582	-1.7267	estimate	0.315	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1406	6681
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1997-04-22	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 0962	15203
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1997-04-22	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 0989	15204
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1997-04-22	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 0995	15205
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1997-04-28	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 1038	15206
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá	Terra firme		1996-08-09	Dry	-51.459746	-1.736906	estimate	0.674	Rocha, R. A. T.	HERP 2008	8234
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1993-04-22	Rainy	-51.4445	-1.7371	estimate	0.165	Rocha, R. A. T.; Silva, R. R.	HERP 1185	6697
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1993-04-23	Rainy	-51.4455	-1.7374	estimate	0.077	Rocha, R. A. T.; Silva, R. R.	HERP 1191	6700
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1993-04-23	Rainy	-51.4455	-1.7374	estimate	0.077	Rocha, R. A. T.; Silva, R. R.	HERP 1193	6701
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1208	6707
Craugastoridae	Pristimantis	fenestratus	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1211	6708
Craugastoridae	Pristimantis	fenestratus	Igarapé Laranjal		Litter	1998-04-04	Rainy	-51.3384	-1.6598	estimate	0.559	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1534	15707
Craugastoridae	Pristimantis	fenestratus	Igarapé Laranjal	Terra firme		1998-02-01	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1603	15590
Craugastoridae	Pristimantis	fenestratus	Igarapé Laranjal	Terra firme	Litter	1998-02-08	Rainy	-51.3513	-1.6581	estimate	2.000	Ribeiro Jr., M. A.	JARB: 1491	15536
Craugastoridae	Pristimantis	fenestratus	Igarapé Laranjal	Terra firme	Litter	1998-02-08	Rainy	-51.3513	-1.6581	estimate	2.000	Ribeiro Jr., M. A.	JARB: 1492	15537
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 993	24685
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.	MAR 1296	24687
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.	MAR 1234	24686
Craugastoridae	Pristimantis	fenestratus	PPBIO plot			2007-06-10	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Ávila-Pires, T. C. S.	CAX 11	27033
Craugastoridae	Pristimantis	fenestratus	PPBIO plot			2007-06-10	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Ávila-Pires, T. C. S.	CAX 12	27034
Craugastoridae	Pristimantis	fenestratus	PPBIO plot			2007-06-10	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Silva, K. R. A.	CAX 13	27035
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-10	Rainy	-51.62464	-1.96835	ok	13.322	Ribeiro Jr., M. A.	MAR 1274	24689
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-10	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A.	MAR 1267	24688
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-13	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.	MAR 1324	24690
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-14	Rainy	-51.6332	-1.9717	ok	14.225	Ribeiro Jr., M. A.	MAR 1331	24691
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-15	Rainy	-51.6288	-1.96028	ok	13.948	Ribeiro Jr., M. A.	MAR 1331	24692
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-17	Rainy	-51.62464	-1.97246	ok	13.297	Ribeiro Jr., M. A.	MAR 1331	24693
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.	MAR 1365	24694
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-21	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A.; Lo-Man-Hung, N. F.	MAR 1412	24695
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-26	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A.; Lo-Man-Hung, N. F.	MAR 1457	24696
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme		2007-06-26	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Lo-Man-Hung, N. F.	MAR 1465	24697
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-03	Dry	-51.6216	-2.00054	ok	12.482	Gomes, J. O.; Silva, K. R. A.	CAX 61	27037
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-03	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O.; Silva, K. R. A.	CAX 45	27036
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-08	Dry	-51.62464	-1.96876	estimate	13.319	Gomes, J. O.	CAX 207	27038
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Silva, K. R. A.	CAX 238	27039
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-11	Dry	-51.62464	-2.0006	ok	12.753	Gomes, J. O.; Silva, K. R. A.	CAX 285	27040
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-12	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Silva, K. R. A.	CAX 302	27042
Craugastoridae	Pristimantis	fenestratus	PPBIO plot	Terra firme	Litter	2007-08-12	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Silva, K. R. A.	CAX 308	27043

Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-12	Dry	-51.6422	-1.9898	ok	15.106	Gomes, J. O.; Silva, K. R. A.	CAX 291	27041
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot			2007-08-13	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Silva, K. R. A.	CAX 319	27044
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-18	Dry	-51.62464	-1.9997	ok	12.806	Gomes, J. O.; Silva, K. R. A.	CAX 402	27046
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-18	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Silva, K. R. A.	CAX 398	27045
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-31	Dry	-51.6422	-1.9906	ok	15.089	Gomes, J. O.; Sturaro, M.	CAX 449	27049
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-31	Dry	-51.6514	-1.9674	ok	16.411	Gomes, J. O.; Sturaro, M.	CAX 448	27048
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-08-31	Dry	-51.6514	-1.9647	ok	16.430	Gomes, J. O.; Sturaro, M.	CAX 446	27047
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-03	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Sturaro, M.	CAX 524	27050
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-06	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O.; Sturaro, M.	CAX 569	27051
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-12	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Sturaro, M.	CAX 670	27052
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6332	-1.96021111	estimate	14.440	Gomes, J. O.; Maciel, A. O.	CAX 772	27053
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Maciel, A. O.	CAX 776	26670
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Maciel, A. O.	CAX 775	27054
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Maciel, A. O.	CAX 778	27055
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-09-29	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 825	27056
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Maciel, A. O.	CAX 991	27057
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-10-03	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Maciel, A. O.	CAX 1001	27058
Craugastoridae	<i>Pristimantis</i>	<i>fenestratus</i>	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.; Maciel, A. O.	CAX 1052	27059
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			1995-11-26	Dry	-51.4375	-1.8725	estimate	0.395	Espósito, Cristina		7621
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.43305556	-1.7925	ok	0.107	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11560	34607
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.435	-1.79111111	ok	0.160	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11553	34601
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.43555556	-1.79138889	ok	0.247	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11554	34602
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.43555556	-1.79138889	ok	0.247	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11555	34603
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.43666667	-1.79111111	ok	0.327	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11556	34604
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.4375	-1.79083333	ok	0.337	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11558	34606
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA			2012-02-15	Rainy	-51.43722222	-1.79111111	ok	0.337	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11557	34605
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA		Litter	1992-10-23	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1960	5749
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA	Terra firme	Litter	1992-11-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2149	5878
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA		Litter	1992-11-19	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2168	5893
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA	Terra firme	Litter	1993-07-13	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1306	6604
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	IBAMA	Terra firme	Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1324	6620
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1997-02-01	Rainy			data deficient		, Alunos da FCAP		8370
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		2002-04-11	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5263	15828
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Baixio		2002-05-07	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002/Zoologia	HERP: 5225	15791
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá					-51.45361111	-1.73688889	estimate	0.096	, Funcionários da Base/ECFP		9150
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira		1991-05-16	Rainy	-51.45361111	-1.73688889	ok	0.096	Almeida, Samuel		5902
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1993-01-14	Rainy	-51.457579	-1.737763	estimate	0.497	Avila-Pires, T. C. S.	TCAP 2178	5915
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1993-01-15	Rainy	-51.45568	-1.737591	estimate	0.295	Avila-Pires, T. C. S.; Gorayeb, I.	TCAP 2182	5919
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1997-06-20	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1114	15305
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1997-06-20	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1115	15306
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1997-06-27	Rainy	-51.4554	-1.7366	ok	0.204	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1128	15307
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira		1992-06-27	Rainy	-51.45361111	-1.73688889	ok	0.096	Brígida, M. Santa		5904
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2002-05-22	Rainy	-51.52333333	-1.76647222	estimate	0.005	Cunha, O. R.	TCAP: 2681	15758
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira		1991-10-18	Dry	-51.45361111	-1.73688889	ok	0.096	Dias, José Orlando		5903
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2012-02-14	Rainy	-51.45472222	-1.73763889	ok	0.221	Ferreira, L.	MSH 11552	34600
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2002-05-17	Rainy	-51.52333333	-1.76647222	estimate	0.005	Galatti, U.; , Fernando	TCAP: 2662	15745
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2002-05-17	Rainy	-51.52333333	-1.76647222	estimate	0.005	Galatti, U.; , Fernando	TCAP: 2664	15747
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	Litter	1996-03-11	Rainy	-51.454779	-1.737259	estimate	0.190	Henzl, M. J.; Galatti, U.	HERP 1917	8116
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	High vegetation	1996-03-12	Rainy	-51.443653	-1.768019	estimate	0.604	Henzl, M. J.; Galatti, U.	HERP 1926	8125
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	High vegetation	1996-03-12	Rainy	-51.443653	-1.768019	estimate	0.604	Henzl, M. J.; Galatti, U.	HERP 1927	8126
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-12	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1921	8120
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	High vegetation	1996-03-13	Rainy	-51.4545	-1.737	ok	0.219	Henzl, M. J.; Galatti, U.	HERP 1936	8135
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	High vegetation	1996-03-13	Rainy	-51.4545	-1.737	ok	0.219	Henzl, M. J.; Galatti, U.	HERP 1937	8136

Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-14	Rainy	-51.45361111	-1.73688889	estimate	0.096	Henzl, M. J.; Galatti, U.	HERP 1949	8148
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	Litter	1996-03-16	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1973	8171
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira		1996-03-16	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1973 A	8172
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Low vegetation	1996-03-16	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1972	8170
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1986	8184
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1987	8186
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1988	8188
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-03-17	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 2000	8201
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1986 A	8185
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1987 A	8187
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1999	8200
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2012-02-09	Rainy	-51.45444444	-1.73722222	ok	0.165	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11473	34596
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2012-02-09	Rainy	-51.45444444	-1.73805556	estimate	0.244	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11474	34597
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1992-11-03	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2054	5807
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1992-11-11	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2116	5912
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1993-07-12	Dry	-51.456378	-1.737314	ok	0.344	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1291	6597
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1993-07-19	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R	HERP 1342	6645
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		2004-04-06	Rainy	-51.45361111	-1.73688889	ok	0.096	Maschio, G.F.	CAIQ: 044	17418
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		2002-04-11	Rainy	-51.457059	-1.737318	estimate	0.406	Miranda, Rosivaldo	HERP: 5261	15826
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			2000-11-26	Dry			data deficient		Prudente, A. L. C.	Caxianá:068	11200
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1997-04-22	Rainy	-51.45361111	-1.73688889	ok	0.096	Ribeiro Jr., M. A.	JARB: 954	15303
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1997-04-22	Rainy	-51.45361111	-1.73688889	ok	0.096	Ribeiro Jr., M. A.	JARB: 955	15304
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1997-04-23	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB: 999	15215
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1997-04-28	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB: 1039	15216
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1997-04-28	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 948	15214
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme	Litter	1997-05-02	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB: 1083	15217
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Capoeira	Litter	1997-05-05	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 1100	15218
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1998-01-23	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1514	15562
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1996-08-08	Dry	-51.459746	-1.736906	estimate	0.674	Rocha, R. A. T.	HERP 2006	8232
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-08-13	Dry	-51.458523	-1.737078	estimate	0.453	Rocha, R. A. T.	HERP 2021	8243
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá	Terra firme		1996-08-15	Dry	-51.458523	-1.737078	estimate	0.453	Rocha, R. A. T.	HERP 2026	8244
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-18	Rainy	-51.459038	-1.736327	estimate	0.581	Rocha, R. A. T.; Silva, R. R.		6723
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-24	Rainy	-51.4452	-1.7365	estimate	0.359	Rocha, R. A. T.; Silva, R. R.	HERP 1201	6705
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1207	6706
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1214	6711
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1217	6712
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1221	6713
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1226	6715
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-04-28	Rainy	-51.4455	-1.7442	estimate	0.195	Rocha, R. A. T.; Silva, R. R.	HERP 1231	6718
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-07-18	Dry			data deficient		Rocha, R. A. T.; Silva, R. R.	HERP 1171	6687
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-07-18	Dry			data deficient		Rocha, R. A. T.; Silva, R. R.	HERP 1172	6688
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Curuá			1993-07-18	Dry			data deficient		Rocha, R. A. T.; Silva, R. R.	HERP 1174	6689
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Laranjal	Capoeira		1997-11-02	Dry	-51.3343	-1.6618	estimate	0.109	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1422	15418
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Laranjal	Terra firme	Litter	1997-12-01	Dry	-51.3495	-1.658	estimate	1.787	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1627	15563
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1591	15585
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Igarapé Laranjal			1997-08-25	Dry	-51.34694444	-1.657	estimate	1.556	Gonçalves, R. C.	JARB: 1301	15361
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11491	34582
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11492	34583
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11493	34584
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	Hoogmoed, M. S.; Avila-Pires, T. C. S.	MSH 11498	34587
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.44388889	-1.99916667	ok	0.045	M. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11499	34588
Dendrobatidae	<i>Adelphobates</i>	<i>galactonotus</i>	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	M. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11494	34585

Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.41944444	-1.95916667	ok	0.063	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11496	34586
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.41638889	-1.96166667	ok	0.063	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11497	34598
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.43861111	-2.00111111	ok	0.647	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11500	34589
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.43861111	-2.00111111	ok	0.647	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11501	34590
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.43861111	-2.00111111	ok	0.647	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11502	34591
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.43861111	-2.00111111	ok	0.647	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11506	34593
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-11	Rainy	-51.43805556	-2.00444444	ok	0.790	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11504	34592
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-12	Rainy	-51.43083333	-2.005	ok	1.595	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11512	34594
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-12	Rainy	-51.43027778	-2.005	ok	1.658	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11513	34595
Dendrobatidae	Adelphobates	galactonotus	Other			2012-02-12	Rainy	-51.42861111	-2.00305556	ok	1.870	W. S.; Avila-Pires, T. C. S.; Macedo, L. C.; Costa	MSH 11510	34599
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-01-31	Rainy	-51.6208	-1.9691	ok	12.909	Moraes, E. R. N.; Santos, R. C.	MAR 226	24578
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-02-01	Rainy	-51.6336	-1.9835	estimate	14.204	Moraes, E. R. N.; Santos, R. C.	MAR 316	24579
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6199	-1.96028	ok	13.015	Santos, M. R.	MAR 405	24580
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-02-03	Rainy	-51.6402	-1.9871	ok	14.838	Silva, A. S. B.	MAR 447	24581
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-02-05	Rainy	-51.62464	-1.96835	ok	13.322	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 502	24582
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-02-06	Rainy	-51.64981	-1.97851	ok	16.049	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 515	24583
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 703	24587
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.62464	-1.96883	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 701	24585
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.62464	-1.96883	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 702	24586
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-03-19	Rainy	-51.6336	-1.9835	estimate	14.204	Candiani, D. F.	MAR 789	24590
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 781	24588
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 784	24589
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-21	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 871	24592
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-22	Rainy	-51.62464	-1.96988	ok	13.319	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 884	24593
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-24	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 937	24594
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1113	24595
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1117	24596
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1118	24597
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1119	24598
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-03-30	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 804	24591
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-06-10	Rainy	-51.6199	-1.96028	ok	13.015	Ribeiro Jr., M. A.	MAR 1276	24599
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-06-12	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A.	MAR 1276	24600
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-06-15	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.	CAX 31	26992
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme		2007-06-21	Rainy	-51.62464	-1.96835	ok	13.322	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1413	24601
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-06-22	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.	CAX 31	26993
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot			2007-07-02	Dry	-51.63777778	-1.96021111	estimate	14.925	Silva, A. S. B.	MAR 573	24584
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-08-03	Dry	-51.6422	-1.9915	ok	15.097	Gomes, J. O. ; Silva, K. R. A.	CAX 50	26994
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-08-15	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O. ; Silva, K. R. A.	CAX 365	26995
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-08-17	Dry	-51.6422	-1.9915	ok	15.097	Gomes, J. O. ; Silva, K. R. A.	CAX 378	26996
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-09-02	Dry	-51.6514	-1.9659	estimate	16.432	Gomes, J. O. ; Sturaro, M.	CAX 486	26997
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-09-11	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O. ; Sturaro, M.	CAX 666	26998
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-09-13	Dry	-51.6332	-1.96021111	estimate	14.440	Gomes, J. O. ; Sturaro, M.	CAX 688	27000
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-09-13	Dry	-51.6514	-1.9656	ok	16.432	Gomes, J. O. ; Sturaro, M.	CAX 687	26999
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6332	-1.96021111	estimate	14.440	Gomes, J. O. ; Maciel, A. O.	CAX 688	27001
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-10-06	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O. ; Maciel, A. O.	CAX 1054	27002
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-10-07	Dry	-51.6422	-1.9889	ok	15.114	Gomes, J. O. ; Maciel, A. O.	CAX 1063	27003
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-10-08	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O. ; Maciel, A. O.	CAX 1102	27005
Dendrobatidae	Adelphobates	galactonotus	PPBIO plot	Terra firme	Litter	2007-10-08	Dry	-51.6422	-1.9889	ok	15.114	Gomes, J. O. ; Maciel, A. O.	CAX 1094	27004
Dendrobatidae	Adelphobates	galactonotus				1996-03-17	Rainy			data deficient		Henzl, M. J.; Galatti, U.	HERP 2001	8202
Dendrobatidae	Adelphobates	galactonotus				1996-03-17	Rainy			data deficient		Henzl, M. J.; Galatti, U.	HERP 2002	8203
Dendrobatidae	Adelphobates	galactonotus				1996-03-17	Rainy			data deficient		Henzl, M. J.; Galatti, U.	HERP 2004	8205
Dendrobatidae	Adelphobates	galactonotus				2004-03-01	Rainy			data deficient		Técnicos do CBO/MPEG.		17306

Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá	Terra firme		1993-01-15	Rainy	-51.45568	-1.737591	estimate	0.295	Avila-Pires, T. C. S.; Gorayeb, I.	TCAP 2181	5918
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá		Litter	1998-03-30	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1513	15699
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá		Litter	1998-04-02	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1527	15702
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá	Terra firme		1998-01-23	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Valente, R.	JARB: 1512	15543
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá	Terra firme	Litter	1996-03-17	Rainy	-51.456152	-1.738996	estimate	0.695	Henzl, M. J.; Galatti, U.	HERP 1996	8196
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá	Terra firme		1993-07-22	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1366	6656
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá			1993-04-19	Rainy	-51.459038	-1.736327	estimate	0.581	Rocha, R. A. T.; Silva, R. R.	HERP 1176	6691
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá			1993-04-27	Rainy	-51.4472	-1.7439	estimate	0.307	Rocha, R. A. T.; Silva, R. R.	HERP 1212	6709
Dendrobatidae	Ranitomeya	amazonica	Igarapé Curuá			1998-01-23	Rainy	-51.34694444	-1.657	estimate	1.556	Valente, R.	JARB: 1476	15561
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot			2007-01-30	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 140	24602
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot			2007-02-06	Rainy	-51.6332	-1.9753	ok	14.194	Silva, A. S. B.	MAR 523	24603
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot			2007-02-06	Rainy	-51.6332	-1.9753	ok	14.194	Silva, A. S. B.	MAR 524	24604
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 583	24605
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 699	24606
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme		2007-03-17	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 736	24607
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme		2007-03-24	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 934	24608
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Silva, K. R. A.	CAX 62	27006
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.63777778	-1.9691	estimate	14.771	Gomes, J. O.; Silva, K. R. A.	CAX 352	27007
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-08-19	Dry	-51.63777778	-1.96028	estimate	14.925	Gomes, J. O.; Silva, K. R. A.	CAX 425	27008
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot			2007-08-20	Dry	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.	CAX 445	27009
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-09-04	Dry	-51.6385	-1.996	estimate	14.382	Gomes, J. O.; Sturaro, M.	CAX 536	27010
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-09-29	Dry	-51.6153	-1.9825	estimate	12.109	Gomes, J. O.; Maciel, A. O.	CAX 763	27011
Dendrobatidae	Ranitomeya	amazonica	PPBIO plot	Terra firme	Litter	2007-10-11	Dry	-51.6543	-1.9691	estimate	16.627	Gomes, J. O.; Maciel, A. O.	CAX 1144	27012
Dendrobatidae	Ranitomeya	amazonica				2004-03-28	Rainy			data deficient		Maschio, G.F.; da Silva, M.A.A.	CAIC: 001	17417
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1482	8801
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1483	8802
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1484	8803
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1485	8804
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1486	8805
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1487	8806
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.	JARB 1488	8807
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.	JARB 1536	8808
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal			1998-01-01	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1592	15587
Hylidae	Dendropsophus	leucophyllatus	Igarapé Laranjal			1998-01-01	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1592	15588
Hylidae	Dendropsophus	melanargyreus	Igarapé Curuá			1997-05-03	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 1096	8811
Hylidae	Dendropsophus	melanargyreus	Igarapé Curuá			1997-05-04	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 1097	8812
Hylidae	Dendropsophus	melanargyreus	Igarapé Curuá			1997-12-01	Dry	-51.453642	-1.736551	estimate	0.062	Ribeiro Jr., M. A.	JARB: 1466	15527
Hylidae	Dendropsophus	melanargyreus	Igarapé Laranjal		Aquatic vegetation	1997-12-06	Dry	-51.3495	-1.658	estimate	1.787	Ribeiro Jr., M. A.	JARB: 1467	15528
Hylidae	Dendropsophus	minusculus	Igarapé Curuá		low vegetation	2002-05-06	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002.Zoologia	HERP: 5218	15784
Hylidae	Dendropsophus	minusculus	Igarapé Curuá		low vegetation	2002-05-06	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002.Zoologia	HERP: 5219	15785
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-24	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 940	24805
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1088	24806
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1089	24807
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1090	24808
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1091	24809
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1092	24810
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1093	24811
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1094	24812
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1095	24813
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1096	24814
Hylidae	Dendropsophus	minusculus	PPBIO plot			2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1097	24815

Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	PPBIO plot				2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1098	24816
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	PPBIO plot				2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1099	24817
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	PPBIO plot				2007-03-27	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1100	24818
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	PPBIO plot				2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1139	24819
Hylidae	<i>Dendropsophus</i>	<i>minusculus</i>	PPBIO plot				2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1140	24820
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	Igarapé Curuá	Baixio	Low vegetation		2002-05-07	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002/Zoologia	HERP: 5221	15787
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	Igarapé Curuá	Baixio	Low vegetation		2002-05-07	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002/Zoologia	HERP: 5221	15788
Hylidae	<i>Dendropsophus</i>	<i>minutus</i>	Igarapé Curuá	Baixio	Low vegetation		2002-05-07	Rainy	-51.455047	-1.725699	estimate	0.116	, Equipe do curso de campo 2002/Zoologia	HERP: 5223	15789
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	PPBIO plot				2007-09-17	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Sturaro, M.	CAX 755	27066
Hylidae	<i>Hypsiboas</i>	<i>boans</i>	PPBIO plot				2007-09-17	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Sturaro, M.	CAX 756	27067
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Terra firme	High vegetation		1996-03-15	Rainy	-51.4569	-1.7374	estimate	0.400	Henzl, M. J.; Galatti, U.	HERP 1967	8166
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó	Low vegetation		1993-07-09	Dry	-51.4559	-1.7245	estimate	0.227	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1259	6543
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó	Low vegetation		1993-07-09	Dry	-51.4559	-1.7245	estimate	0.227	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1259	6544
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó	Low vegetation		1993-07-19	Dry	-51.456099	-1.72678	estimate	0.141	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1350	6650
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Terra firme	Low vegetation		1996-03-15	Rainy	-51.4533	-1.7362	estimate	0.000	Henzl, M. J.; Galatti, U.	HERP 1966	8165
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Terra firme	Low vegetation		1996-03-15	Rainy	-51.4533	-1.7362	estimate	0.000	Henzl, M. J.; Galatti, U.	HERP 1968	8167
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Terra firme	Low vegetation		1996-03-15	Rainy	-51.4545	-1.7377	estimate	0.219	Henzl, M. J.; Galatti, U.	HERP 1965	8164
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó			2002-05-05	Rainy	-51.453373	-1.736692	estimate	0.054	, Equipe do curso de campo 2002	HERP: 5211	15777
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó			2002-05-05	Rainy	-51.453373	-1.736692	estimate	0.054	, Equipe do curso de campo 2002	HERP: 5212	15778
Hylidae	<i>Hypsiboas</i>	<i>cinerascens</i>	Igarapé Curuá	Igapó			2002-05-05	Rainy	-51.453373	-1.736692	estimate	0.054	, Equipe do curso de campo 2002	HERP: 5213	15779
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	Igarapé Curuá	Terra firme	High vegetation		1996-03-15	Rainy	-51.4569	-1.7374	estimate	0.400	Henzl, M. J.; Galatti, U.	HERP 1963	8162
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	Igarapé Curuá	Igapó	Low vegetation		2002-05-05	Rainy	-51.453373	-1.736692	estimate	0.054	, Equipe do curso de campo 2002	HERP: 5214	15780
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	Igarapé Curuá				2005-03-29	Rainy			data deficient		Valente, Renata		18616
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	PPBIO plot				2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1141	24821
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	PPBIO plot				2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1142	24822
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	PPBIO plot				2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1143	24823
Hylidae	<i>Hypsiboas</i>	<i>geographicus</i>	PPBIO plot				2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.	CAX 27	27068
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	Igarapé Laranjal		Aquatic vegetation		1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1469	8829
Hylidae	<i>Hypsiboas</i>	<i>lanciformis</i>	Igarapé Laranjal		Aquatic vegetation		1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1537	8830
Hylidae	<i>Hypsiboas</i>	<i>punctatus</i>	Igarapé Laranjal		Aquatic vegetation		1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.	JARB 1538	8813
Hylidae	<i>Hypsiboas</i>	<i>raniceps</i>	IBAMA		High vegetation		1992-11-16	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2155	5888
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá		High vegetation		1992-11-06	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2079	5907
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Várzea	High vegetation		1993-11-11	Dry	-51.4569	-1.7371	estimate	0.400	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2121	5911
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá		High vegetation		1996-03-14	Rainy	-51.454253	-1.73607	estimate	0.066	Henzl, M. J.; Galatti, U.	HERP 1959	8158
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá		High vegetation		1996-03-14	Rainy	-51.454253	-1.73607	estimate	0.066	Henzl, M. J.; Galatti, U.	HERP 1960	8159
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Várzea	High vegetation		1997-04-29	Rainy	-51.4527	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB: 1074	15314
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Várzea	High vegetation		1997-04-29	Rainy	-51.4527	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB: 1075	15315
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Terra firme	Litter		1997-04-22	Rainy	-51.4545	-1.7369	ok	0.142	Ribeiro Jr., M. A.	JARB: 1044	15317
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá		Litter		1997-10-20	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1307	15417
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Várzea	Low vegetation		1992-10-26	Dry	-51.45361111	-1.73688889	ok	0.096	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1996	5905
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Várzea	Low vegetation		1992-10-26	Dry	-51.45361111	-1.73688889	ok	0.096	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1996	5906
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá		Low vegetation		2002-05-06	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia	HERP: 5216	15782
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1993-01-16	Rainy	-51.459038	-1.736327	estimate	0.581	Avila-Pires, T. C. S.	TCAP 2189	5923
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1997-04-23	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 0996	15199
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1997-08-09	Dry	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.; Barbosa, A. C.	JARB: 1161	15319
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1997-08-10	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.; Vaz, F.	JARB: 1162	15320
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1997-08-10	Dry	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.; Vaz, F.	JARB: 1163	15321
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1997-08-16	Dry	-51.45361111	-1.73688889	ok	0.096	Ribeiro Jr., M. A.	JARB: 1187	15322
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá	Capoeira			1997-08-24	Dry	-51.4553	-1.7369	ok	0.215	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1276	15323
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Curuá				1999-10-29	Dry	-51.443653	-1.768019	estimate	0.604	Andrade, Iracenir		15718
Hylidae	<i>Hypsiboas</i>	<i>wavvini</i>	Igarapé Laranjal	Capoeira	Litter		1997-11-02	Dry	-51.3343	-1.6618	estimate	0.109	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1426	15416
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation		1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1939	8138

Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1940	8139
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1941	8140
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1942	8141
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá		Aquatic vegetation	1997-11-22	Dry	-51.4447	-1.7406	estimate	0.000	Valente, R.	JARB 1459	15516
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Terra firme	Litter	1997-04-29	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB 1076	15213
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Terra firme	Low vegetation	1996-03-14	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1961	8160
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Várzea		1997-04-26	Rainy	-51.455047	-1.724745	ok	0.210	Ribeiro Jr., M. A.	JARB 1034	15211
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Várzea		1997-04-26	Rainy	-51.455047	-1.724745	ok	0.210	Ribeiro Jr., M. A.	JARB 1035	15212
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB 1031	15208
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB 1032	15209
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB 1033	15210
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Várzea		1997-04-29	Rainy	-51.4524	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB 1077	15201
Hylidae	<i>Lysapsus</i>	<i>Laevis</i>	Igarapé Curuá	Várzea		1997-04-29	Rainy	-51.4524	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB 1078	15202
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	Igarapé Curuá	Igapó		1998-03-31	Rainy	-51.5242	-1.7672	estimate	0.014	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1522	15700
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	Igarapé Curuá			2000-11-01	Dry	-51.45527778	-1.738	ok	0.295	gupe do curso de campo zoologia MPEG/UFF		15719
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1111	24965
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme	Litter	2007-08-19	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Sturaro, M.	CAX 426	27079
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6336	-1.9835	ok	14.204	Avila-Pires, T. C. S.	CAX 244	27082
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme	Litter	2007-09-28	Dry	-51.6422	-1.96021111	estimate	15.431	Gomes, J. O.; Maciel, A. O.	CAX 782	27081
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme	Litter	2007-10-05	Dry	-51.6336	-1.9835	ok	14.204	Ribeiro Jr., M. A.	CAX 1023	27080
Hylidae	<i>Osteocephalus</i>	<i>oophagus</i>	PPBIO plot	Terra firme	Litter	2007-10-13	Dry	-51.6511	-1.9605	estimate	16.331	Gomes, J. O.; Maciel, A. O.	CAX 1175	27083
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	IBAMA		Litter	1992-10-22	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1951	5745
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Curuá	Terra firme	Low vegetation	2002-05-05	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002	HERP: 5208	15774
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Curuá	Terra firme		1993-01-15	Rainy	-51.45568	-1.737591	estimate	0.295	Avila-Pires, T. C. S.; Gorayeb, I.	TCAP 2188	5922
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Curuá			1993-04-30	Rainy	-51.4452	-1.7463	estimate	0.359	Rocha, R. A. T.; Silva, R. R.	HERP 1241	6722
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Laranjal			1997-08-25	Dry	-51.34694444	-1.65694444	estimate	1.549	Gonçalves, R. Corrêa	JARB 1301	14279
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Laranjal			1997-11-02	Dry	-51.47	-1.72	ok	0.172	Rocha, R. A. T.; Bernardi, J. A. R.	JARB 1427	14277
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	Igarapé Laranjal			1998-03-01	Rainy	-51.34694444	-1.65694444	estimate	1.549	Souza, J. R. A. C.	JARB 1580	14278
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-01-26	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 95	24967
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-01-26	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 96	24968
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-01-26	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 94	24966
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 319	24969
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 320	24970
Hylidae	<i>Osteocephalus</i>	<i>taurinus</i>	PPBIO plot			2007-02-05	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 522	24971
Hylidae	<i>Phyllomedusa</i>	<i>hypochondrialis</i>	IBAMA		Litter	1992-10-24	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1977	5754
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Igapó	High vegetation	1993-07-19	Dry	-51.45545	-1.72634	estimate	0.092	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1348	6648
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Terra firme	High vegetation	1996-03-09	Rainy	-51.4563	-1.737	ok	0.344	Henzl, M. J.; Galatti, U.	HERP 1893	8094
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Igapó		1993-07-19	Dry	-51.456099	-1.726504	estimate	0.147	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1349	6649
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Igapó		1993-07-19	Dry	-51.456099	-1.726504	estimate	0.147	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1416	6684
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Igapó		1993-07-19	Dry	-51.456099	-1.726504	estimate	0.147	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1416	6949
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá	Igapó		1993-07-19	Dry	-51.456099	-1.726504	estimate	0.147	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1416	6950
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá			1997-05-02	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB 1094	15200
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	Igarapé Curuá			2002-05-05	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5215	15781
Hylidae	<i>Phyllomedusa</i>	<i>vaiantii</i>	PPBIO plot	Terra firme	Litter	2007-09-07	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.; Sturaro, M.	CAX 588	27084
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Curuá	Várzea	High vegetation	1997-04-29	Rainy	-51.4527	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB 1079	15245
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Curuá	Capoeira	Litter	1997-10-28	Dry	-51.454993	-1.737806	estimate	0.254	Bernardi, J. A. R.; Rocha, R. A. T.; Souza, J. C.	JARB 1362	8819
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Ribeiro Jr., M. A.	JARB 1471	15521
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1539	15710
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1539	15711
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1539	15712
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1540	15714
Hylidae	<i>Scinax</i>	<i>boesemani</i>	Igarapé Laranjal		Aquatic vegetation	1998-04-04	Rainy	-51.3518	-1.6549	estimate	2.157	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1541	15715

Hylidae	Scinax	boesemani	Igarapé Laranjal	Capoeira	Litter	1997-11-01	Dry	-51.3343	-1.6618	estimate	0.109	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1416	15415
Hylidae	Scinax	boesemani	Igarapé Laranjal	Capoeira		1997-08-25	Dry	-51.604629	-1.777144	ok	0.135	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1289	15246
Hylidae	Scinax	garbei	Igarapé Curuá		Aquatic vegetation	1997-06-22	Rainy	-51.453524	-1.736605	estimate	0.054	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1122	8824
Hylidae	Scinax	garbei	Igarapé Curuá		Low vegetation	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1948	5741
Hylidae	Scinax	garbei	Igarapé Curuá	Igapó		1997-06-24	Rainy	-51.44027778	-1.74833333	estimate	0.162	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1126	8825
Hylidae	Scinax	garbei	Igarapé Laranjal	Capoeira	Litter	1997-08-23	Dry	-51.3345	-1.6611	estimate	0.109	, Moradores do local	JARB: 1287	15325
Hylidae	Scinax	nebulosus	IBAMA			1993-04-19	Rainy	-51.4375	-1.8725	estimate	0.395	Rocha, R. A. T.; Silva, R. R.	HERP 1183	6695
Hylidae	Scinax	nebulosus	IBAMA			1993-04-19	Rainy	-51.4375	-1.8725	estimate	0.395	Rocha, R. A. T.; Silva, R. R.	HERP 1184	6696
Hylidae	Scinax	nebulosus	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1938	8137
Hylidae	Scinax	nebulosus	Igarapé Curuá		Aquatic vegetation	1997-06-22	Rainy	-51.453524	-1.736605	estimate	0.054	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1123	8820
Hylidae	Scinax	nebulosus	Igarapé Curuá		Low vegetation	2002-05-06	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia	HERP: 5217	15783
Hylidae	Scinax	nebulosus	Igarapé Curuá	Igapó		1993-07-11	Dry	-51.4553	-1.7264	estimate	0.071	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1285	6593
Hylidae	Scinax	nebulosus	Igarapé Curuá			1995-11-06	Dry			data deficient		Almeida, Samuel		7613
Hylidae	Scinax	nebulosus	Igarapé Curuá	Capoeira		1997-08-23	Dry	-51.45361111	-1.73674444	data deficient	0.075	Rocha, R. A. T.; Braga, Izael C.	JARB 1272	8821
Hylidae	Scinax	nebulosus	Igarapé Laranjal		Aquatic vegetation	1998-05-01	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1600	15555
Hylidae	Scinax	nebulosus	Igarapé Laranjal			1997-08-24	Dry	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1278	8822
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-23	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 928	24993
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-24	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 939	24994
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-26	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1033	24995
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1101	24996
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1102	24997
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1103	24998
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1104	24999
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1105	25000
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1106	25001
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-27	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1107	25002
Hylidae	Scinax	nebulosus	PPBIO plot			2007-03-29	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1138	25003
Hylidae	Scinax	nebulosus	PPBIO plot	Terra firme	Litter	2007-06-11	Rainy	-51.6336	-1.9835	ok	14.204	Souza, I. A.	CAX 24	27090
Hylidae	Scinax	nebulosus	PPBIO plot			2007-06-11	Rainy	-51.63777778	-1.96021111	estimate	14.925	Souza, I. A.	CAX 25	27091
Hylidae	Scinax	ruber	IBAMA	Capoeira		1992-11-17	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2165	5891
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira	Litter	1996-03-09	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1894	8095
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira	Litter	1996-03-09	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1895	8096
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira	Litter	1996-03-16	Rainy	-51.4553	-1.73734	ok	0.243	Henzl, M. J.; Galatti, U.	HERP 1970	8168
Hylidae	Scinax	ruber	Igarapé Curuá			1997-04-25	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 1028	8814
Hylidae	Scinax	ruber	Igarapé Curuá			1997-04-25	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 1029	8815
Hylidae	Scinax	ruber	Igarapé Curuá			1997-04-28	Rainy	-51.4545	-1.7369	ok	0.142	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1036	8818
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira		1997-08-18	Dry	-51.45361111	-1.73688889	ok	0.096	Ribeiro Jr., M. A.	JARB: 1188	15324
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira		1997-08-25	Dry	-51.4553	-1.7369	ok	0.215	Bernardi, J. A. R.	JARB 1288	8816
Hylidae	Scinax	ruber	Igarapé Curuá			1998-02-01	Rainy	-51.45472222	-1.73763889	ok	0.221	Bernardi, J. A. R.; Rocha, R. A. T.		15651
Hylidae	Scinax	ruber	Igarapé Curuá			1998-02-01	Rainy	-51.45472222	-1.73763889	ok	0.221	Bernardi, J. A. R.; Rocha, R. A. T.		15652
Hylidae	Scinax	ruber	Igarapé Curuá	Capoeira		2002-04-11	Rainy	-51.4373	-1.737318	estimate	0.759	Equipe do curso de campo 2002/Zoologia; , Lucio	HERP: 5262	15827
Hylidae	Scinax	ruber	Igarapé Laranjal		Aquatic vegetation	1998-01-01	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1593	15569
Hylidae	Scinax	ruber	Igarapé Laranjal		Aquatic vegetation	1998-01-01	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1593	15570
Hylidae	Scinax	ruber	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Ribeiro Jr., M. A.	JARB: 1489	15522
Hylidae	Scinax	ruber	Igarapé Laranjal		Aquatic vegetation	1998-02-07	Rainy	-51.3522	-1.6542	estimate	2.213	Ribeiro Jr., M. A.	JARB: 1490	15523
Hylidae	Scinax	ruber	Igarapé Laranjal	Capoeira	Aquatic vegetation	1998-05-01	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1599	15567
Hylidae	Scinax	ruber	Igarapé Laranjal	Capoeira	Aquatic vegetation	1998-05-01	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1599	15568
Hylidae	Scinax	ruber	Igarapé Laranjal	Capoeira	Litter	1997-12-01	Dry	-51.3343	-1.6618	estimate	0.109	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1625	15586
Hylidae	Scinax	ruber	Igarapé Laranjal	Capoeira	Litter	1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1543	15716
Hylidae	Scinax	ruber	Igarapé Laranjal	Igapó		1998-03-01	Rainy	-51.3512	-1.6563	estimate	2.020	Rael, J.; Souza, C.	JARB: 1579	15529
Hylidae	Scinax	ruber	Igarapé Laranjal	Igapó		1998-03-01	Rainy	-51.3512	-1.6563	estimate	2.020	Rael, J.; Souza, C.	JARB: 1582	15530
Hylidae	Scinax	ruber	Igarapé Laranjal	Igapó		1998-03-01	Rainy	-51.3512	-1.6563	estimate	2.020	Rael, J.; Souza, C.	JARB: 1578	15531

Hylidae	<i>Trachycephalus</i>	<i>resinifitrix</i>	Igarapé Curuá	Terra firme		1998-03-31	Rainy	-51.51777778	-1.75694444	estimate	1.022	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1523	15507
Leptodactylidae	<i>Adenomera</i>	<i>hyaedactyla</i>	Igarapé Curuá			1998-04-03	Rainy	-51.45527778	-1.738	ok	0.295	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1530	15703
Leptodactylidae	<i>Hydrotaetare</i>	<i>schmidt</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3352	-1.6602	estimate	0.170	Bernardi, J. A. R.	JARB: 1570	8790
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	IBAMA		Litter	1992-11-16	Dry	-51.4375	-1.8725	ok	0.395	ogmoed, M. S.; Avila-Pires, T. C. S.; Rocha, R.	TCAP: 2154	7333
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	Igarapé Curuá	Capoeira	Litter	1996-03-15	Rainy	-51.4553	-1.73734	ok	0.243	Henzl, M. J.; Galatti, U.	HERP: 1964	8163
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	Igarapé Curuá	Terra firme	Litter	1997-04-22	Rainy	-51.45361111	-1.73688889	ok	0.096	Ribeiro Jr., M. A.	JARB: 950	15247
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	Igarapé Curuá			1997-04-22	Rainy	-51.4545	-1.7369	ok	0.142	Ribeiro Jr., M. A.	JARB: 949	15313
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 795	24824
Leptodactylidae	<i>Leptodactylus</i>	<i>knudseni</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 1068	24825
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	IBAMA	Terra firme	Litter	1992-11-15	Dry	-51.4375	-1.8725	ok	0.395	ogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP: 2150	5879
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	IBAMA	Terra firme	Litter	1993-07-13	Dry	-51.4375	-1.8725	ok	0.395	ogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP: 1307	6605
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá		Litter	2002-04-07	Rainy	-51.454296	-1.72393	estimate	0.197	, Equipe do curso de campo 2002/Zoologia	HERP: 5232	15798
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá		Litter	2002-04-07	Rainy	-51.454296	-1.72393	estimate	0.197	, Equipe do curso de campo 2002/Zoologia	HERP: 5233	15799
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá		Litter	2002-04-07	Rainy	-51.454296	-1.72393	estimate	0.197	, Equipe do curso de campo 2002/Zoologia	HERP: 5234	15800
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá	Terra firme		2002-05-07	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia	HERP: 5229	15795
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá		Litter	1997-04-19	Rainy	-51.4545	-1.7369	ok	0.142	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 936	8826
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	Igarapé Curuá		Litter	1997-04-19	Rainy	-51.4545	-1.7369	ok	0.142	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 935	8827
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 117	24828
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 118	24829
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 104	24826
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-29	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 108	24827
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.	MAR: 172	24883
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 183	24830
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.	MAR: 245	24884
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 246	24831
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 281	24832
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 283	24834
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 282	24833
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 318	24835
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 373	24840
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 407	24842
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 379	24841
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 363	24838
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 365	24839
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 357	24837
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 341	24836
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 434	24844
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 438	24845
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 430	24843
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 591	24851
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 588	24850
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 663	24857
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 652	24856
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 647	24855
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 643	24853
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 644	24854
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 640	24852
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-02-12	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR: 681	24858
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 917	24860
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 918	24861
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 893	24859
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR: 986	24862

Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 994	24864
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 989	24863
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1062	24867
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1055	24866
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1035	24865
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-28	Rainy	-51.64392	-1.97851	ok	15.429	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1080	24868
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-30	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1127	24869
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1183	24873
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1177	24871
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1178	24872
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1146	24870
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1211	24874
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot			2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Fonseca, Hermes	CAX 19	27069
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-11	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.	MAR 1283	24875
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-12	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1308	24876
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-16	Rainy	-51.6332	-1.978	ok	14.161	Ribeiro Jr., M. A.	MAR 1339	24877
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-16	Rainy	-51.64424	-1.97851	ok	15.429	Ribeiro Jr., M. A.	MAR 1343	24878
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.	MAR 1370	24880
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A.	MAR 1362	24879
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A.	MAR 1393	24882
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.	MAR 1383	24881
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 561	24849
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.9719	ok	13.308	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 540	24846
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 544	24847
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 545	24848
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme	Litter	2007-08-04	Dry	-51.6514	-1.9701	ok	16.318	Gomes, J. O.; Silva, K. R. A.	CAX 87	27070
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.6514	-1.9665	ok	16.398	Gomes, J. O.; Silva, K. R. A.	CAX 346	27071
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot	Terra firme	Litter	2007-09-01	Dry	-51.6514	-1.9659	estimate	16.432	Gomes, J. O.; Silva, K. R. A.	CAX 460	27072
Leptodactylidae	<i>Leptodactylus</i>	<i>mystaceus</i>	PPBIO plot			2009-03-20	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 815	29079
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá	Terra firme	Litter	2002-05-05	Rainy	-51.4561	-1.7366	estimate	0.279	, Equipe do curso de campo 2002	HERP: 5206	15772
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá			1993-01-18	Rainy	-51.459038	-1.736327	estimate	0.581	Avila-Pires, T. C. S.	TCAP 2193	5925
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá	Terra firme		1993-01-15	Rainy	-51.45568	-1.737591	estimate	0.295	Avila-Pires, T. C. S.; Gorayeb, I.	TCAP 2179	5916
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá	Terra firme		2002-04-09	Rainy	-51.457059	-1.737318	estimate	0.406	Miranda, Rosivaldo	HERP: 5255	15819
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá	Terra firme	Litter	1998-02-01	Rainy	-51.45656	-1.737296	ok	0.362	Rocha, R. A. T.; Bernardi, J. A. R.	JARB: 1594	15509
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá			1993-04-24	Rainy	-51.4452	-1.7365	estimate	0.359	Rocha, R. A. T.; Silva, R. R.	HERP 1198	6704
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Curuá			1993-07-18	Dry			data deficient		Rocha, R. A. T.; Silva, R. R.	HERP 1175	6690
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Terra firme	Litter	1997-12-01	Dry	-51.3495	-1.658	estimate	1.787	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1604	15564
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Terra firme	Litter	1997-12-01	Dry	-51.3495	-1.658	estimate	1.787	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1604	15565
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Terra firme	Litter	1997-12-01	Dry	-51.3495	-1.658	estimate	1.787	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1604	15566
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Capoeira	Litter	1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1544	15717
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Ribeiro Jr., M. A.	JARB: 1589	15597
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Ribeiro Jr., M. A.	JARB: 1589	15598
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Ribeiro Jr., M. A.	JARB: 1589	15599
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal	Capoeira		1998-02-01	Rainy	-51.3359	-1.6606	estimate	0.254	Ribeiro Jr., M. A.	JARB: 1589	15600
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal			1998-02-06	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1474	15539
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	Igarapé Laranjal			1998-02-06	Rainy	-51.34694444	-1.657	estimate	1.556	Ribeiro Jr., M. A.	JARB: 1475	15540
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 175	24885
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 255	24887
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 284	24888
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 1231	24939
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot			2007-02-01	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 229	24886
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 372	24893

Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 376	24894
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 377	24895
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 378	24896
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 386	24897
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 389	24898
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 403	24899
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 362	24892
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 356	24891
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 325	24889
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 346	24890
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 429	24900
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 653	24905
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 657	24906
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arccoverde, D. L.	MAR 633	24904
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 716	24907
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 718	24908
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot			2007-03-18	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 763	25007
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 853	24913
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 857	24914
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 859	24915
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 802	24909
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 809	24911
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 852	24912
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 808	24910

Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 927	24916
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 980	24918
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 949	24917
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1075	24927
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1016	24920
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1024	24921
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1025	24922
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1028	24923
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1014	24919
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1069	24926
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1060	24925
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1037	24924
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1184	24931
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1185	24932
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1186	24933
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1197	24934
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1181	24930
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1161	24929
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1156	24928
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1212	24935
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1216	24936
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1219	24937
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-04-02	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1226	24938
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A.	MAR 1242	24941
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-06-08	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.	MAR 1233	24940
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 558	24902
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 559	24903
Leptodactylidae	<i>Leptodactylus</i>	<i>paraensis</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 531	24901
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	IBAMA		Litter	1992-10-22	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1951	5744
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	IBAMA			1992-11-02	Dry	-51.4375	-1.8725	ok	0.395	Ribeiro, Eli Silvana B.	TCAP 2050	5806
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Terra firme		2002-04-09	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5254	15817
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Capoeira	Litter	1997-10-10	Dry	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 1305	8785
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá			1998-04-22	Rainy	-51.45361111	-1.73688889	ok	0.096	Bernardi, J. A. R.	JARB 0951	8789
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá			1997-06-22	Rainy	-51.51777778	-1.75694444	estimate	1.022	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1124	8788
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Terra firme	Litter	1996-03-09	Rainy	-51.45361111	-1.73688889	ok	0.096	Henzl, M. J.; Galatti, U.	HERP 1892	8093
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Capoeira	Litter	1996-03-13	Rainy	-51.455219	-1.737679	ok	0.257	Henzl, M. J.; Galatti, U.	HERP 1944	8143
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Igapó	Low vegetation	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1258	6542
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Curuá	Terra firme	Litter	1993-07-20	Dry	-51.45832	-1.72648	estimate	0.346	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1351	6651
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Laranjal	Capoeira		1998-04-05	Rainy	-51.3338	-1.66	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1555	8786
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	Igarapé Laranjal	Capoeira		1998-04-06	Rainy	-51.3335	-1.6609	estimate	0.085	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1560	8787
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 726	24943
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-19	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 786	24944
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 820	24945
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 988	24946
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1064	24948
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1065	24949
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1046	24947
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1068	24950
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1218	24952
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1210	24951
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot			2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.	CAX 26	27073
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 547	24942

Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>	PPBIO plot			2007-10-06	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Maciel, A. O.	CAX 26	27074
Leptodactylidae	<i>Leptodactylus</i>	<i>pentadactylus</i>				1992-10-25	Dry			data deficient		Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1986	5755
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	IBAMA			1992-11-18	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2167	5892
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	IBAMA	Igapó	Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1321	6618
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	IBAMA	Igapó	Litter	1993-07-15	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1321	6619
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó		2002-05-05	Rainy	-51.453373	-1.736692	estimate	0.054	, Equipe do curso de campo 2002	HERP: 5210	15776
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Terra firme	Litter	2002-05-05	Rainy	-51.4561	-1.7366	estimate	0.279	, Equipe do curso de campo 2002	HERP: 5205	15771
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Baixio		2002-04-09	Rainy	-51.52333333	-1.76647222	estimate	0.005	, Equipe do curso de campo 2002/Zoologia	HERP: 5257	15818
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá		Litter	2002-05-05	Rainy	-51.457059	-1.737318	estimate	0.406	, Equipe do curso de campo 2002/Zoologia	HERP: 5220	15786
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó		1997-04-28	Rainy			data deficient		Bernardi, J. A. R.	JARB 1040	8809
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Terra firme		1997-05-02	Rainy	-51.372156	-1.692944	estimate	2.381	Bernardi, J. A. R.	JARB 1095	8810
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá			1997-05-02	Rainy	-51.372156	-1.692944	estimate	2.381	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1093	8828
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Várzea		1997-06-20	Rainy			data deficient		Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1121	8817
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-06-09	Rainy	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1256	6526
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-06-09	Rainy	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1256	6527
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6528
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6529
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6530
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6531
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6532
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6533
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6534
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6535
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6536
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6537
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6538
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6539
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6540
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	Igarapé Curuá	Igapó	Litter	1993-07-09	Dry	-51.455884	-1.72331	estimate	0.278	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1257	6541
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	PPBIO plot	Terra firme		2007-03-24	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 936	24954
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	PPBIO plot	Terra firme		2007-03-29	Rainy	-51.63777778	-1.96021111	estimate	14.925	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1136	24955
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	PPBIO plot			2007-06-08	Rainy	-51.6336	-1.9835	estimate	14.204	Avila-Pires, T. C. S.	CAX 009	27075
Leptodactylidae	<i>Leptodactylus</i>	<i>petersii</i>	PPBIO plot			2007-06-11	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro-Jr., M. A.	CAX 22	27076
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Curuá	Capoeira	Litter	1996-03-13	Rainy	-51.4543	-1.737	ok	0.134	Henzl, M. J.; Galatti, U.	HERP 1932	8131
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.4557	-1.7371	ok	0.259	Henzl, M. J.; Galatti, U.	HERP 1953	8152
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.4557	-1.7371	ok	0.259	Henzl, M. J.; Galatti, U.	HERP 1954	8153
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.4557	-1.7371	ok	0.259	Henzl, M. J.; Galatti, U.	HERP 1955	8154
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Curuá	Capoeira	Litter	1996-03-14	Rainy	-51.4557	-1.7371	ok	0.259	Henzl, M. J.; Galatti, U.	HERP 1956	8155
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	Igarapé Laranjal	Terra firme		1997-06-30	Rainy	-51.34694444	-1.657	estimate	1.556	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1156	8823
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 361	24956
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 364	24957
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 708	24959
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 709	24960
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 948	24961
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 995	24962
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A.; Abrantes, S. H. F.	MAR 1201	24963
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-06-19	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1388	24964
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.; Arcoverde, D. L.	MAR 546	24958
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme	Litter	2007-08-05	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O.; Silva, K. R. A.	CAX 117	27077
Leptodactylidae	<i>Leptodactylus</i>	<i>rhodomystax</i>	PPBIO plot	Terra firme	Litter	2007-08-14	Dry	-51.6514	-1.9692	ok	16.369	Gomes, J. O.; Silva, K. R. A.	CAX 347	27078
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	Igarapé Curuá	Terra firme		2004-04-11	Rainy			data deficient		Maschio, G.F.; da Silva, M.A.A.; de Souza, A.C.B.; V.	CAIC; 063	17416
Leptodactylidae	<i>Lithodytes</i>	<i>lineatus</i>	Igarapé Curuá	Baixio		1996-08-10	Dry	-51.453953	-1.72393	estimate	0.291	Rocha, R. A. T.	HERP 2013	8237

Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96335	ok	13.430	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 393	24972
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-02-04	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 461	24973
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-02-08	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 593	24974
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 666	24976
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 642	24975
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 710	24977
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 711	24978
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 712	24979
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 847	24980
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 848	24981
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 817	29085
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 925	24984
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 916	24983
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 900	24982
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 963	24985
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1015	24986
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1056	24988
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1040	24987
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1175	24989
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1176	24990
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 1158	29084
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-06-24	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Lo-Man-Hung, N. F.	MAR 1438	24991
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O. ; Silva, K. R. A.	CAX 236	27085
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme	Litter	2007-08-13	Dry	-51.63777778	-2.00054	estimate	14.222	Gomes, J. O. ; Silva, K. R. A.	CAX 324	27086
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-09-02	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Sturaro, M.	CAX 502	27087
Leptodactylidae	<i>Physalaemus</i>	<i>ephippifer</i>	PPBIO plot	Terra firme		2007-09-11	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O. ; Sturaro, M.	CAX 655	27088
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 369	29081
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 360	29082
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 717	29074
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	PPBIO plot	Terra firme		2009-03-20	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 815	29078
Microhylidae	<i>Chiasmocleis</i>	<i>avilapiresae</i>	PPBIO plot	Terra firme				-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A.	MAR 979	23299
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 252	24526
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 881	24527
Microhylidae	<i>Chiasmocleis</i>	<i>hudsoni</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.6514	-1.9683	ok	16.404	Gomes, J. O. ; Maciel, A. O.	CAX 958	26990
Microhylidae	<i>Chiasmocleis</i>	<i>shudikarensis</i>	IBAMA	Terra firme	Litter	1993-07-13	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S. ; Moraes, R. J. R. ; Silva, R. R.	HERP 1305	6603
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 006	17419
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 007	17420
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 008	17421
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 009	17422
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 010	17423
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 011	17424
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	Igarapé Curuá	Terra firme		2004-04-29	Rainy			data deficient		Maschio, G.F. ; da Silva, M.A.A. ; de Souza, A.C.B. ; V.	CAIÇ: 012	17425
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 256	24536
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 380	24540
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 381	24541
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96786	ok	13.331	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 385	24542
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 367	24539
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 349	24538
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 326	24537
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-02-11	Rainy	-51.62464	-1.96488	ok	13.382	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 671	24543
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 713	24544
Microhylidae	<i>Ctenophryne</i>	<i>geayi</i>	PPBIO plot	Terra firme		2007-03-16	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 725	24545

Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 854	24550
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 856	24551
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 806	24547
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-20	Rainy	-51.6332	-1.9692	ok	14.262	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 800	24546
Microhylidae	Ctenophryne	geayi	PPBIO plot			2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 845	24548
Microhylidae	Ctenophryne	geayi	PPBIO plot			2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 846	24549
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-23	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 901	24552
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 975	24555
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 971	24554
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 962	24553
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1022	24558
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1031	24559
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1011	24556
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1012	24557
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1059	24560
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1187	24567
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.62464	-1.96044	ok	13.411	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1198	24568
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1179	24565
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1180	24566
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1153	24563
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1154	24564
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9679	ok	14.281	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1149	24562
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9667	ok	14.587	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1147	24561
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1208	24570
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.9688	ok	14.245	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1203	24569
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-04-02	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1223	24571
Microhylidae	Ctenophryne	geayi	PPBIO plot			2007-06-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1241	29088
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.	MAR 1289	24573
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.	MAR 1290	24574
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-11	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.	MAR 1286	24572
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-12	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.	MAR 1307	24575
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A.	MAR 1375	24577
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme		2007-06-18	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A.	MAR 1371	24576
Microhylidae	Ctenophryne	geayi	PPBIO plot	Terra firme	Litter	2007-10-09	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O.; Maciel, A. O.	CAX 1120	26991
Microhylidae	Ctenophryne	geayi	PPBIO plot			2009-07-12	Dry	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A.	MAR 1306	29073
Microhylidae	Hamptophryne	boliviana	IBAMA	Terra firme	Litter	1993-07-13	Dry	-51.4375	-1.8725	ok	0.395	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1304	6602
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 173	24698
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-01-30	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 189	24699
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 257	24700
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 285	24702
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-01	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 269	24701
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 371	24710
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.62464	-1.96932	ok	13.323	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 382	24711
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 366	24709
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 352	24706
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 353	24707
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 354	24708
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 347	24703
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 348	24704
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-02	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 350	24705
Microhylidae	Hamptophryne	boliviana	PPBIO plot			2007-02-02	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 343	29083
Microhylidae	Hamptophryne	boliviana	PPBIO plot	Terra firme		2007-02-03	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 431	24712

Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-06	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 512	24713
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-08	Rainy	-51.62464	-1.96641	ok	13.370	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 598	24727
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-08	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 587	24726
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-08	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 585	24725
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 656	24731
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 658	24732
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-11	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 655	24730
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-11	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 650	24729
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-02-11	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 646	24728
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-13	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 894	24752
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-13	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 895	24753
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-13	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 896	24754
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 855	24751
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 821	24737
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 822	24738
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 823	24739
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 824	24740
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 825	24741
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 826	24742
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 827	24743
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 828	24744
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 829	24745
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 830	24746
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 831	24747
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 832	24748
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	2007-03-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 833	2

Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 959	24776
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 960	24777
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 961	24778
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1006	24784
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1004	24783
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 953	24771
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 954	24772
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1001	24782
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-25	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 947	24770
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1021	24790
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.62464	-1.97287	ok	13.287	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1017	24789
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1006	24785
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1008	24786
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1009	24787
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-26	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1010	24788
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1063	24798
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1050	24793
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1051	24794
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1052	24795
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1053	24796
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1054	24797
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1043	24792
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-27	Rainy	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1039	24791
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1173	24800
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1174	24801
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1162	24799
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-03-31	Rainy	-51.6336	-1.9835	estimate	14.204	Ribeiro Jr., M. A. ; Abrantes, S. M. F.	MAR 1170	29086
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-04-01	Rainy	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Abrantes, S. H. F.	MAR 1207	24802
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-06-20	Rainy	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A.	MAR 1401	24804
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.97141	ok	13.256	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 562	24723
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.62464	-1.96996	ok	13.314	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 564	24724
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 552	24719
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 553	24720
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 554	24721
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9775	ok	14.161	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 555	24722
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 550	24717
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9753	ok	14.194	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 551	24718
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 543	24715
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.974	ok	14.213	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 549	24716
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-02	Dry	-51.6332	-1.9706	ok	14.239	Ribeiro Jr., M. A. ; Arcoverde, D. L.	MAR 538	24714
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme		2007-07-12	Dry	-51.6332	-1.9726	ok	14.210	Ribeiro Jr., M. A.	MAR 1305	24803
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-08-09	Dry	-51.63777778	-1.9871	estimate	14.551	Gomes, J. O.	CAX 248	27060
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-08-13	Dry	-51.63777778	-1.97851	estimate	14.624	Gomes, J. O. ; Silva, K. R. A.	CAX 331	27061
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-09-07	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O. ; Sturaro, M.	CAX 579	27062
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-10-01	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O. ; Maciel, A. O.	CAX 938	27063
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.6225	-2.00054	ok	12.571	Gomes, J. O. ; Maciel, A. O.	CAX 986	27065
Microhylidae	<i>Hamptophryne</i>	<i>boliviana</i>	PPBIO plot	Terra firme	Litter	2007-10-02	Dry	-51.62464	-2.0042	ok	12.736	Gomes, J. O. ; Maciel, A. O.	CAX 979	27064
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Aquatic vegetation				-51.453524	-1.736605	estimate	0.054	Bernardi, J. A. R. ; Pinheiro, E. C.	JARB 1396	8800
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Aquatic vegetation		1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Bernardi, J. A. R. ; Souza, J. C. R.	JARB 1364	8795
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Aquatic vegetation		1997-10-29	Dry	-51.453642	-1.736551	estimate	0.062	Bernardi, J. A. R. ; Souza, J. C. R.	JARB 1373	8797
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Aquatic vegetation		1997-10-29	Dry	-51.453642	-1.736551	estimate	0.062	Bernardi, J. A. R. ; Souza, J. C. R.	JARB 1375	8798
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Aquatic vegetation		1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Lucas, Izael de S.	JARB 1366	8796

Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Igapó	Aquatic vegetation	1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Souza, José R. C.	JARB 1412	8791
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Igapó	Aquatic vegetation	1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Souza, José R. C.	JARB 1413	8792
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Igapó	Aquatic vegetation	1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Souza, José R. C.	JARB 1414	8793
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Curuá	Igapó	Aquatic vegetation	1997-10-28	Dry	-51.453642	-1.736551	estimate	0.062	Souza, José R. C.	JARB 1415	8794
Pipidae	<i>Pipa</i>	<i>pipa</i>	Igarapé Laranjal			1997-12-01	Dry	-51.3495	-1.658	estimate	1.787	Bernardi, J. A. R.; Rocha, R. A. T.	JARB: 1622	15578
Pipidae	<i>Pipa</i>	<i>pipa</i>	PPBIO plot			2007-03-19	Rainy	-51.63777778	-1.96021111	estimate	14.925	C., Israel L.	MAR 787	24992
Pipidae	<i>Pipa</i>	<i>pipa</i>	PPBIO plot			2007-09-08	Dry	-51.6336	-1.9835	estimate	14.204	Gomes, J. O.; Sturaro, M.	CAX 615	27089
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1562	8776
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1563	8777
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1564	8778
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1565	8779
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1566	8780
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1567	8781
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1568	8782
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal			1998-04-06	Rainy	-51.3475	-1.6612	estimate	1.517	Bernardi, J. A. R.; Rocha, R. A. T.	JARB 1569	8783
Ranidae	<i>Lithobates</i>	<i>palmipes</i>	Igarapé Laranjal	Igapó		1998-03-01	Rainy	-51.3512	-1.6563	estimate	2.020	Souza, J. Rael C.	JARB 1577	8784

Appendix 8. Locations of the 16 *Adelphobates galactonus* individuals listed under ‘other’ and removed from the analysis of assemblages. Blue points represent correct coordinates based from GPS data.



Appendix 9. Chi-square with bootstrapping results for life-history traits and categories to define the samples species in Caxiuanã (see table 6).

Location

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	1509.070 ^a	188	.000
Likelihood Ratio	1170.108	188	.000
Linear-by-Linear Association	33.169	1	.000
N of Valid Cases	1825		

a. 180 cells (75.0%) have expected count less than 5. The minimum expected count is .01.

Habitat preference

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	5519514.000 ^a	141	.000

Likelihood Ratio	2053072.891	141	.000
Linear-by-Linear Association	303083.193	1	.000
N of Valid Cases	1839838		

Microhabitat preference

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	5448.315 ^a	141	.000
Likelihood Ratio	2637.530	141	.000
Linear-by-Linear Association	720.258	1	.000
N of Valid Cases	1838		

a. 139 cells (72.4%) have expected count less than 5. The minimum expected count is .02.

Aquatic reproductive type

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	7352.000 ^a	188	.000
Likelihood Ratio	3200.854	188	.000
Linear-by-Linear Association	117.818	1	.000
N of Valid Cases	1838		

a. 184 cells (76.7%) have expected count less than 5. The minimum expected count is .02.

Activity period

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	3676.000 ^a	94	.000
Likelihood Ratio	2650.121	94	.000
Linear-by-Linear Association	1184.017	1	.000
N of Valid Cases	1838		

a. 92 cells (63.9%) have expected count less than 5. The minimum expected count is .01.

Appendix 10. Estimates areas of Caxiuanã assemblages. All base maps are edited from Google Maps.

Curuá -



Laranjal -



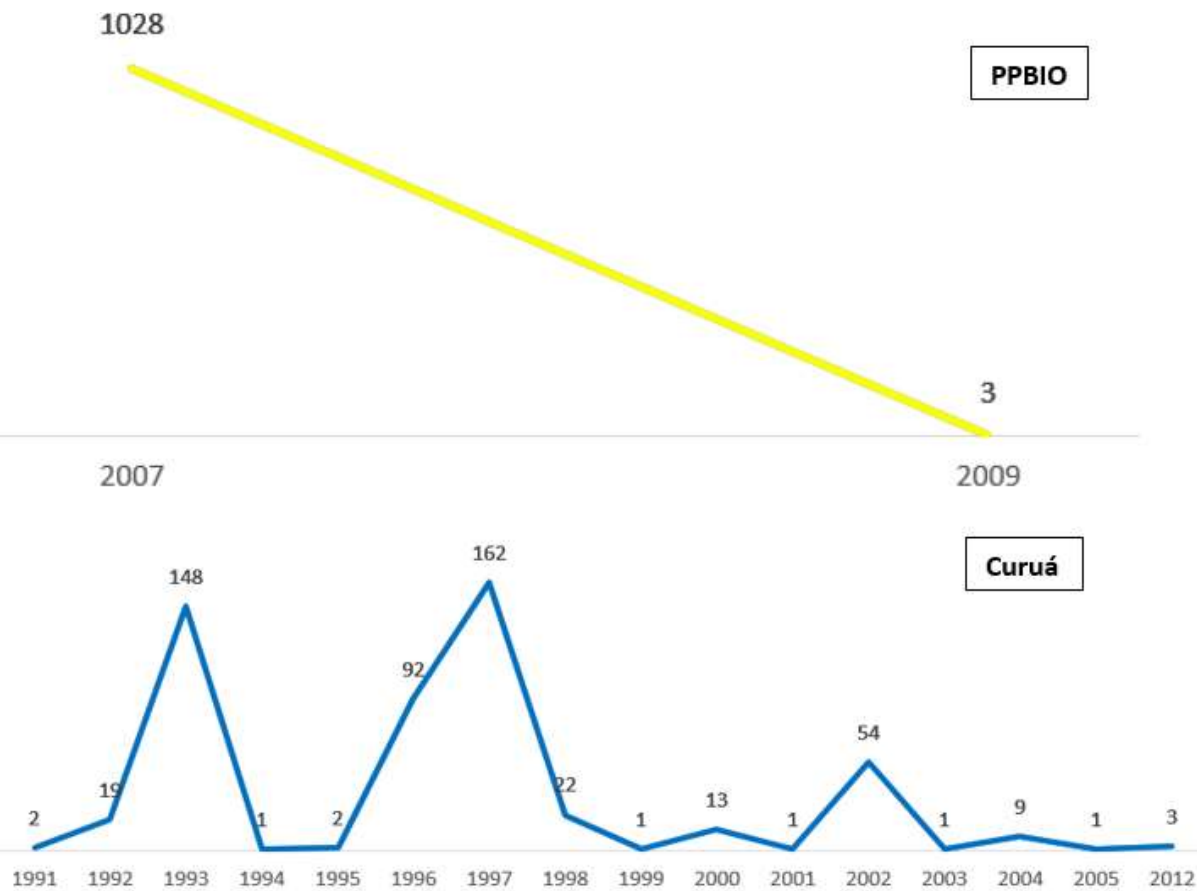
PPBIO -



IBAMA -



Appendix 11. All individuals collected in the PPBIO and Curuá assemblages. The Dataset is filtered under 'Location' by 'PPBIO plot' and 'Curuá' and sorted by 'Date' smallest to largest.



Appendix 12. All *Amazophrynella bokermanni* individuals collected by Avila-Pires and Hoogmoed in this research. Dataset is filtered under 'Species' to only show *Amazophrynella bokermanni* and is sorted by 'Date' oldest to newest.

Family	Genus	Species	location	Habita	Microhabitat	Date	season	ecimal Longit	Decimal Latitu	extra info	ance from wa	Collectors (added)	Collection numb	Catalog numb
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5731
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5732
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5733
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5734
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5735
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5736
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-22	Dry	-51.45305556	-1.73638889	ok	0.006	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 1946	5737
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-10-27	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2004	5766
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1992-11-10	Dry	-51.457579	-1.737763	estimate	0.497	Hoogmoed, M. S.; Avila-Pires, T. C. S.; Silva, R.	TCAP 2108	5866
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-01-16	Rainy	-51.459038	-1.736327	estimate	0.581	Avila-Pires, T. C. S.	TCAP 2186	5921
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6512
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6513
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6514
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6515
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6516
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6517
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6518
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6519
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-06-09	Rainy	-51.4581	-1.7247	estimate	0.434	Hoogmoed, M. S.	HERP 1251	6520
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1244	6500
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1244	6501
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-08	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1244	6502
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6509
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6510
Bufo	Amazophrynella	bokermanni	Igarapé Curuá			1993-07-09	Dry	-51.45642	-1.73755	estimate	0.365	Hoogmoed, M. S.	HERP 1251	6511
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6548
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6549
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6550
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6551
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6552
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6553
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6554
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6555
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6556
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6557
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6558
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6559
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-10	Dry	-51.4591	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1261	6560
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1282	6590
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-11	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1282	6591
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4588	-1.7273	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1279	6587
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4588	-1.7273	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1279	6588
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6574
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6575
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6576
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6577
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6578
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6579
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6580
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6581
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-11	Dry	-51.4591	-1.7269	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1274	6582
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-13	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1298	6601
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-15	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1319	6617
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-16	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1328	6637
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-20	Dry	-51.45832	-1.72648	estimate	0.346	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1353	6652
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-20	Dry	-51.45832	-1.72648	estimate	0.346	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1353	6653
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-22	Dry	-51.459103	-1.73738	estimate	0.624	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1367	6657
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1382	6664
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1382	6665
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-23	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1382	6666
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-27	Dry	-51.4578	-1.738	estimate	0.509	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1398	6676
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-27	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1395	6673
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme		1993-07-27	Dry	-51.459103	-1.727	estimate	0.367	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1395	6674
Bufo	Amazophrynella	bokermanni	Igarapé Curuá	Terra firme	Litter	1993-07-28	Dry	-51.4585	-1.7268	estimate	0.327	Hoogmoed, M. S.; Moraes, R. J. R.; Silva, R. R.	HERP 1403	6678

Appendix 13. All *Lysapsus laevis*. Individuals listed in the dataset. The dataset is filtered under ‘Species’ to only show and is sorted by ‘Date’ oldest to newest.

Family	Genus	Species	location	Habitat	Microhabitat	Date	season	Decimal Longitude	Decimal Latitude	extra info	Distance from water	Collectors (added)	Collection number	Catalog number
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1939	8138
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1940	8139
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1941	8140
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation	1996-03-13	Rainy	-51.454071	-1.736326	estimate	0.101	Henzl, M. J.; Galatti, U.	HERP 1942	8141
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá		Aquatic vegetation	1997-11-22	Dry	-51.4447	-1.7406	estimate	0.000	Valente, R.	JARB: 1459	15516
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Terra firme	Litter	1997-04-29	Rainy	-51.45656	-1.737296	ok	0.362	Ribeiro Jr., M. A.	JARB: 1076	15213
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Terra firme	Low vegetation	1996-03-14	Rainy	-51.46166667	-1.73666667	estimate	0.505	Henzl, M. J.; Galatti, U.	HERP 1961	8160
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Várzea		1997-04-26	Rainy	-51.455047	-1.724745	ok	0.210	Ribeiro Jr., M. A.	JARB: 1034	15211
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Várzea		1997-04-26	Rainy	-51.455047	-1.724745	ok	0.210	Ribeiro Jr., M. A.	JARB: 1035	15212
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 1031	15208
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 1032	15209
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá			1997-04-26	Rainy	-51.45472222	-1.73763889	ok	0.221	Ribeiro Jr., M. A.	JARB: 1033	15210
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Várzea		1997-04-29	Rainy	-51.4524	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB: 1077	15201
Hylidae	<i>Lysapsus</i>	<i>laevis</i>	Igarapé Curuá	Várzea		1997-04-29	Rainy	-51.4524	-1.7366	ok	0.008	Ribeiro Jr., M. A.	JARB: 1078	15202